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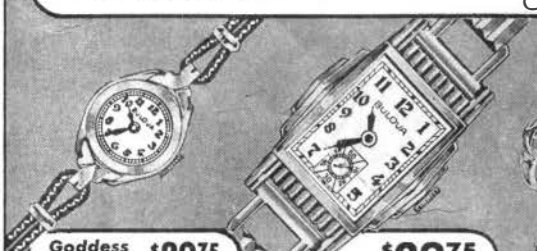

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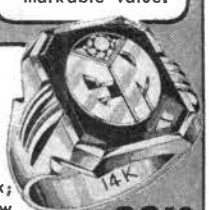

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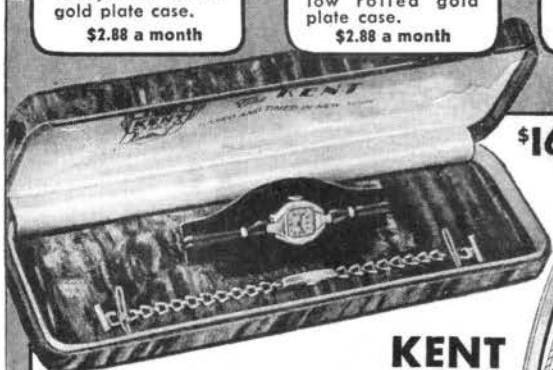

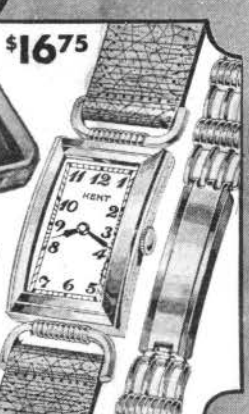

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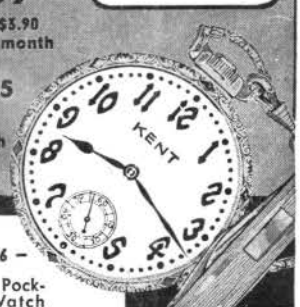

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VOL. 3 SEPTEMBER, 1941 NO. 1

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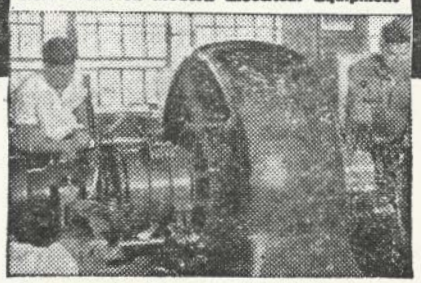

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FANTASY REVIEWS

Fantasy Books

LEST DARKNESS FALL by L. Sprague de Camp. Henry Holt & Co., New York. $2.50.

Mr. de Camp brings the "Connecticut Yankee" up to date in "Lest Darkness Fall." Martin Padway, archaeologist and, as it turns out, general human encyclopedia, is flung back via lightning bolt into Ostrogothic Italy of the sixth century A. D. With the Dark Ages about to fall, with Italy about to be ruined by the successive invastions of the Byzantines and the Lombards, it is up to Padway to save his own skin and to prevent Darkness from falling.

Just how he does this is told in the best deCampian style, so well known to readers of fantasy. The book moves quickly, with no pauses for breath, but nowhere does Mr. de Camp lose his reader. In fluent, racy fashion, with liberal sprinklings of humor—quite often, delightfully ribald—he leaps from incident to incident.

Padway, himself, is perhaps the weakest character in the book. He knows too much, and does too much, to be more than simply a *deus ex machina*, a driving force that lies behind the wacky developments of the story. But there are half a dozen other characters in the book, who, once met, will never be forgotten.

There is Thomasus the Syrian ("Are you listening, God"); Fritharik the Vandal (and his "nameless grave"); King Thiudahad (the Loony) and his rapscallion son; Mathaswentha, the Amazon; and then Julia of Apulia and her interesting livestock.

It is worth noting in passing that the history in the novel, except for what Padway does to it (and it shouldn't happen to a dog, what he does to it) is strictly accurate.

In fact, from all possible angles, "Lest Darkness Fall" is a book that no fantasy fan worth his salt, should or *could* afford to miss. Though it has appeared before in magazine form, it is now considerably lengthened, and is well worth a reading.

—Isaac Asimov

PRESENTING MOONSHINE by John Collier. The Viking Press, New York, $2.50.

Here is a collection of twenty-four short stories which compose some of the most unique twentieth-century fantasies we have ever read. Subtle, remarkably clever, and very well written, these pieces would grace the best of fantasy magazines and would place John Collier among the top rank of fantasy writers.

"Green Thoughts" is one of the stories that took our fancy. A tale of an orchid grower and the horrible fate that overcame him and his niece. A whimsical, subtly horrifying bit. And there's a yarn on the bottle with things in it there that is a masterpiece. Other yarns about the devil and India and sleeping-beauties will tickle the palate of the most hardened fantasy-connoisseur.

—Donald A. Wollheim

THE OTHER WORLDS. An Anthology. Wilfred Funk, New York. $2.50.

Phil Stong, an author of several non-fantasy volumes, received a commission to put together an anthology of science-fiction and fantasy stories from the pulp magazines. This is it. In it Phil Stong has put together what he considers the most representative of the 20,000 or so stories that have been published in fantasy magazines since the days of Gernsback's original magazine.

He claims to be America's leading authority on science-fiction. He thinks most

(Continued on page 8)

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Fantasy Reviews

(Continued from page 6)

of it is trash. He demonstrates what he thinks in this book.

In spite of the fact that the announced intention of the book was to cover science-fiction, the greater part is material that came from the weird field. He refuses all stories having an interplanetary basis as nonsensical. He refuses almost all other types of stories based on science on the grounds that "the primary motif of a good fantastic story is that it should not be even remotely possible." Since no self-respecting editor (even of a fantasy magazine) or writer goes on such a basis, the stories Stong collects had to be mediocre.

With very few exceptions they are just that. Name any ten great science-fiction or weird stories you would expect to be here. They will be missing.

Phil Stong in his various introductions makes clear his cynical and antagonistic attitude towards what is supposed to be his hobby—fantasy fiction. We think the reader can get better fantasy for a quarter the price of this volume on any newsstand.

—Donald A. Wollheim

THE LUNGFISH AND THE UNICORN by Willy Ley. Modern Age Books, New York, $2.75.

Readers of science-fiction have enjoyed Willy Ley's numerous articles on odd aspects and side-shoots of science. In this, his first American book, Mr. Ley presents a whole menagerie of beasts and would-be beasts from the annals of zoology.

Animals that are supposed to be mythical are proved to have originals in actual beasts or else in reports of beasts that may some day materialize. His chapter on "Rumors and Shadows" is intriguing. All the animals of the earth have not been discovered by any means, the full borders of the earth's inhabitants have not been mapped.

He speaks of the creatures that have become extinct in historical knowledge and of those which ought to have been extinct millions of years ago but aren't. His closing chapter on the ancient continent of Gondwanaland whose shreds and remnants we know as South America, Africa, Australia and Lemuria, is one of the most interesting in the book. This is a volume which science-fictionists will want to read. We heartily recommend it.

—Donald A. Wollheim

THE BOOKS OF CHARLES FORT. Henry Holt, New York. $4.00.

Charles Fort was the most consistent enemy of orthodox science of our modern days. He died several years ago but while he lived he published four books packed with data which he claims science has refused to investigate or cannot dare accept.

Here are hundreds of cases of mysterious disappearances and appearances, of rains of animals of all types, of cities in the sky, of lights and signals from the moon and Mars, of space-ships and mysterious unearthly visitors all soberly reported in sober newspapers all over the world. Fort delighted to evolve weird theories to account for these things and delighted to heap scorn on the sedate men of science who refuse to even acknowledge what is verifiable and reported fact. The sea-serpents and the Martians, the gnomes and the Kaspar Hausers, the poltergeists and the weeping statues all lock hands and march in mad array about the schools of learning.

More plots for science fiction have been taken from these books than is realized. They are eagerly sought after and eagerly read. They are challenges that remain unanswered. They are must reading for any man willing to chance having his mental world rocked around him.

—Donald A. Wollheim

THEY CALL ME THE "CHARLES ATLAS" OF PEORIA!

by H.W.

Photo of an Atlas Pupil. This story is based on an actual letter, in Mr. Atlas' files

YES SIR! People call ME the "Charles Atlas of Peoria," which is my home town. They've named ME after the man who won the title "World's Most Perfectly-Developed Man!" And they are not kidding. They wouldn't DARE. Not with the fighting build, bulging muscles, smashing strength I've got now—the body that made me CHAMPION of the crowd!

But a short time ago I was a weakling—the "sissy" who took a back seat every time other fellows began showing their muscles. I had to sneak away whenever they did feats of strength. I *knew* what it meant to be the sorriest-looking specimen of the bunch. I wanted a real he-man build more than anything. I determined to get it. And I DID!

Here's How I Got My New Physique

Well, after a little while, my friends rubbed their eyes and looked at me twice. They couldn't believe I was the same person! Because I WAS a different person. And you can't blame me today for getting a big kick out of seeing that "What-a-Man!" look in their eyes whenever I strip for gym, beach, or around the swimming pool!

How did I do it? What *made* me "The Charles Atlas of Peoria?" The answer is—*Charles Atlas* HIMSELF! His marvelous method of "*Dynamic Tension*" made a NEW MAN of me. And now read what Charles Atlas himself has to say to YOU:

I'll prove that YOU, too, can be a NEW MAN!

And it only takes 15 minutes a day

Charles Atlas

Fellows, I know what it means to be skinny, flabby, half-alive. I myself was once a 97-lb. weakling. Ashamed of my body. Afraid to stand up against anyone else, knowing what a beating I'd take. Then I discovered "*Dynamic Tension*"—the amazing method that changed me from a frail nobody into winner of the title, "World's Most Perfectly Developed Man." And now the secret that worked miracles for me has worked them for thousands of others.

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Photo of **CHARLES ATLAS.** *holder of title: "World's Most Perfectly-Developed Man."*

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MARS-TUBE

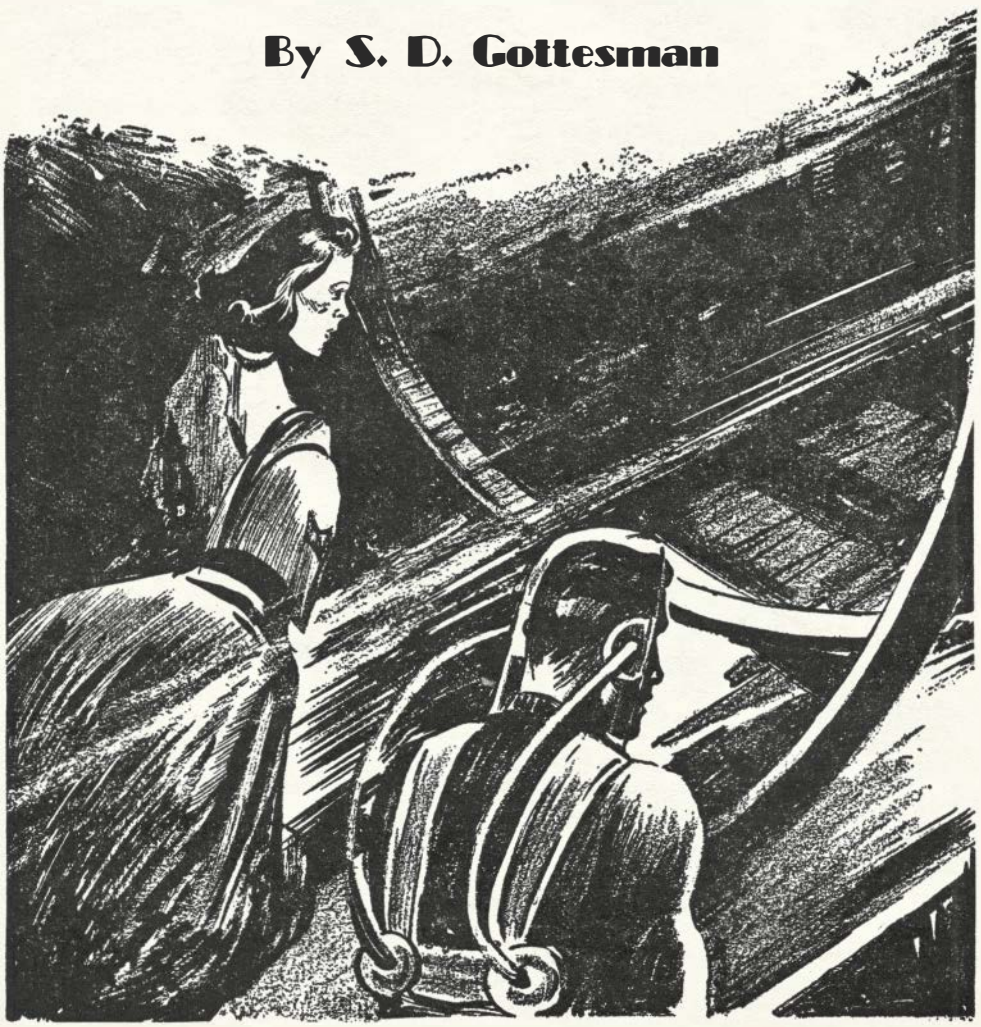
The dead Martians had made no distinction between fact and fiction in their writings. So naturally, Earth's archaeologists took it for granted that some of the impossible things they mentioned were fictitious. . . .

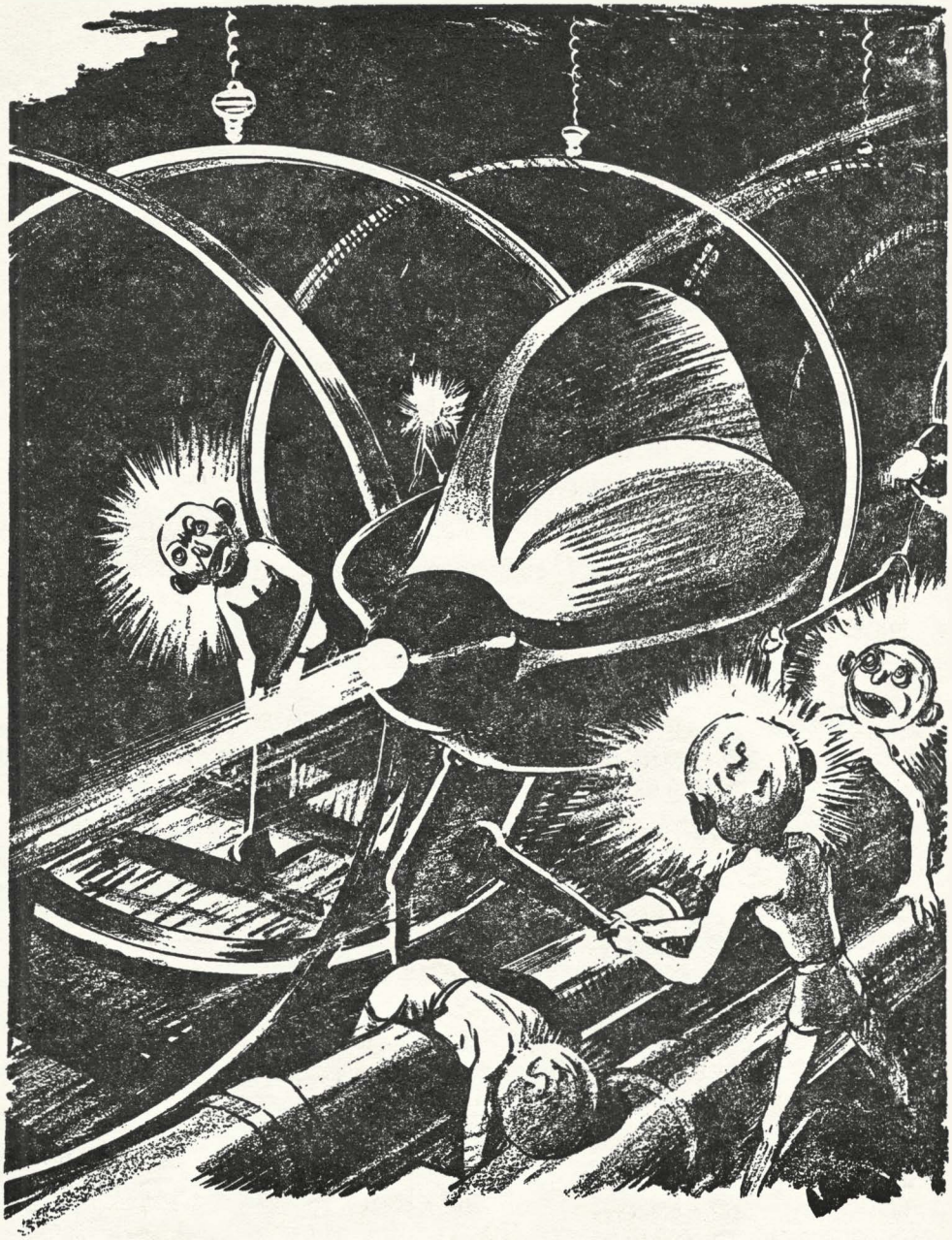
By S. D. Gottesman

CHAPTER ONE

After Armageddon

RAY STANTON set his jaw as he stared at the molded lead seal on the museum door. Slowly he deciphered its inscription, his tongue stumbling over the unfamiliar sibilants of the Martian language as he read it aloud before translating. "To the—strangers from the third planet—who have won their — bitter — triumph — we of Mars charge you—not to wantonly destroy—that which you will find—within this door . . . Our codified learning—may serve you—better than we ourselves—might have done."





Stanton was ashamed of being an Earthman as he read this soft indictment. "Pathetic," he whispered. "Those poor damned people"

His companion, a slight, dark-haired girl who seemed out of place in the first exploratory expedition to visit Mars after the decades-long war that had annihilated its population, nodded in agreement. "The war was a crying shame," she confirmed. "But mourning the dead won't bring them back. To work, Stanton!"

Stanton shook his head dolefully, but copied the seal's inscription into his voluminous black archaeologist's notebook. Then he tore off the seal and tentatively pushed the door. It swung open easily, and an automatic switch snapped on the

hidden lights as the two people entered.

Both Stanton and Annamarie Hudgins, the girl librarian of the expedition, had seen many marvels in their wanderings over and under the red planet, for every secret place was open to their eyes. But as the lights slowly blossomed over the colossal hall of the library, he staggered back in amazement that so much stately glory could be built into one room.

The synthetic slabs of gem-like rose crystal that the Martians had reserved for their most awesome sanctuaries were here flashing from every wall and article of furnishing, winking with soft ruby lights. One of the typically Martian ramps led up in a gentle curve from their left. The practical Annamarie at once commenced to mount it, heading for the reading-rooms that would be found above. Stanton followed more slowly, pausing to examine the symbolic ornamentation on the walls.

"We must have guessed right, Annamarie," he observed, catching up with her. "This one's the central museum-library for sure. Take a look at the wall-motif."

Annamarie glanced at a panel just ahead, a bas-relief done in the rose crystal. "Because of the *ultima* symbol, you mean?"

"Yes, and because—well, look." The room in which they found themselves was less noble than the other, but considerably more practical. It was of radial design, corridors converging like the spokes of a wheel on a focal point where they stood. Inset in the floor—they were almost standing on it—was the *ultima* symbol, the quadruple linked circles which indicated pre-eminence. Stanton peered down a corridor lined with racks of wire spools. He picked up a spool and stared at its title-tag.

"Where do you suppose we ought to start?" he asked.

"Anywhere at all," Annamarie replied. "We've got lots of time, and no way of knowing what to look for. What's the one in your hands?"

"It seems to say, 'The Under-Eaters' —whatever that may mean." Stanton juggled the tiny "book" undecidedly. "That phrase seems familiar somehow. What is it?"

"Couldn't say. Put it in the scanner and we'll find out." Stanton obeyed, pulling a tiny reading-machine from its cubicle. The delicacy with which Stanton threaded the fragile wire into its proper receptacle was something to watch. The party had ruined a hundred spools of records before they'd learned how to adjust the scanners, and Stanton had learned caution.

Stanton and his companion leaned back against the book-racks and watched the fluorescent screen of the scanner. A touch of the lever started its operation. There was a soundless flare of light on the screen as the wire made contact with the scanning apparatus, then the screen filled with the curious wavering peak-and-valley writing of the Martian graphic language.

BY THE end of the third "chapter" the title of the book was still almost as cryptic as ever. A sort of preface had indicated that "Under-Eaters" was a name applied to a race of underground demons who feasted on the flesh of living Martians. Whether these really existed or not Stanton had no way of telling. The Martians had made no literary distinction between fact and fiction, as far as could be learned. It had been their opinion that anything except pure thought-transference was only approximately true, and that it would be useless to distinguish between an intentional and an unintentional falsehood.

But the title had no bearing on the context of the book, which was a kind of pseudo-history with heavily allusive

passages. It treated of the Earth-Mars war; seemingly it had been published only a few months before the abrupt end to hostilities. One rather tragic passage, so Stanton thought, read:

"A special meeting of the tactical council was called on (an untranslatable date) to discuss the so-called new disease on which the attention of the enemy forces has been concentrating. This was argued against by (a high official) who demonstrated conclusively that the Martian intellect was immune to nervous diseases of any foreign order, due to its high development through telepathy as cultivated for (an untranslatable number of) generations. A minority report submitted that this very development itself would render the Martian intellect more liable to succumb to unusual strain. (A medical authority) suggested that certain forms of insanity were contagious by means of telepathy, and that the enemy-spread disease might be of that type."

Stanton cursed softly: "Damn Moriarty and his rocket ship. Damn Sweeney for getting killed and damn and double-damn the World Congress for declaring war on Mars!" He felt like a murderer, though he knew he was no more than a slightly pacifistic young exploring archaeologist. Annamarie nodded sympathetically but pointed at the screen. Stanton looked again and his imprecations were forgotten as he brought his mind to the problem of translating another of the strangely referential passages:

"At this time the Under-Eaters launched a bombing campaign on several of the underground cities. A number of subterranean caves were linked with the surface through explosion craters and many of the sinister creations fumbled their way to the surface. A corps of technologists prepared to re-seal the tunnels of the Revived, which was done with complete success, save only in (an untranslatable place-name) where several Under-Eaters managed to wreak great havoc before being slain or driven back to their tunnels. The ravages of the Twice-Born, however, were trivial compared to the deaths resulting from the mind diseases fostered by the flying ships of the Under-Eaters, which were at this time. . . ."

The archaeologist frowned. There it was again. Part of the time "Under Eaters" obviously referred to the Earthmen, the rest of the time it equally obviously did not. The text would limp along in styleless, concise prose and then in would break an obscure reference to the "Creations" or "Twice-Born" or "Raging Glows."

"Fairy tales for the kiddies," said Annamarie Hudgins, snapping off the scanner.

Stanton replied indirectly: "Put it in the knapsack. I want to take it back and show it to some of the others. Maybe they can tell me what it means." He swept a handful of other reading-bobbins at random into the knapsack, snapped it shut, and straightened. "Lead on, Mac-Hudgins," he said.

OF THE many wonders of the red planet, the one that the exploration party had come to appreciate most was the colossal system of subways which connected each of the underground cities of Mars.

With absolute precision the web of tunnels and gliding cars still functioned, and would continue to do so until the central controls were found by some Earthman and the vast propulsive mechanisms turned off.

The Mars-tube was electrostatic in principle. The perfectly round tunnels through which the subway sped were studded with hoops of charged metal. The analysis of the metal hoops and the generators for the propulsive force had been beyond Earthly science, at least as rep-

resented by the understaffed exploring party.

Through these hoops sped the single-car trains of the Mars-tube, every four minutes through every hour of the long Martian day. The electrostatic emanations from the hoops held the cars nicely balanced against the pull of gravity; save only when they stopped for the stations, the cars never touched anything more substantial than a puff of air. The average speed of the subway, stops not included, was upwards of five hundred miles an hour. There were no windows in the cars, for there would have been nothing to see through them but the endless tunnel wall slipping smoothly and silently by.

So easy was the completely automatic operation that the men from Earth could scarcely tell when the car was in motion, except by the signal panel that dominated one end of the car with its blinking lights and numerals.

Stanton led Annamarie to a station with ease and assurance. There was only one meaning to the tear-drop-shaped guide signs of a unique orange color that were all over Mars. Follow the point of a sign like that anywhere on Mars and you'd find yourself at a Mars-Tube station—or what passed for one.

Since there was only one door to a car, and that opened automatically whenever the car stopped at a station, there were no platforms. Just a smaller or larger anteroom with a door also opening automatically, meeting the door of the tube-car.

A train eventually slid in, and Stanton ushered Annamarie through the sliding doors. They swung themselves gently onto one of the excessively broad seats and immediately opened their notebooks. Each seat had been built for a single Martian, but accomodated two Terrestrials with room to spare.

At perhaps the third station, Annamarie, pondering the implications of a passage in the notebook, looked up for an abstracted second—and froze. "Ray," she whispered in a strangled tone. "When did that come in?"

Stanton darted a glance at the forward section of the car, which they had ignored when entering. Something—something animate—was sitting there, quite stolidly ignoring the Terrestrials. "A Martian" he whispered to himself, his throat dry.

It had the enormous chest and hips, the waspish waist and the coarse, bristly hairs of the Martians. But the Martians were all dead—

"It's only a robot" he cried more loudly than was necessary, swallowing as he spoke. "Haven't you seen enough of them to know what they look like by now?"

"What's it doing here?" gulped Annamarie, not over the fright.

As though it were about to answer her question itself, the thing's metallic head turned, and its blinking eyes swept incuriously over the humans. For a long second it stared, then the dull glow within its eye-sockets faded, and the head turned again to the front. The two had not set off any system of reflexes in the creature.

"I never saw one of them in the subway before," said Annamarie, passing a damp hand over her sweating brow.

Stanton was glaring at the signal panel that dominated the front of the car. "I know why, too," he said. "I'm not as good a linguist as I thought I was—not even as good as I ought to be. We're on the wrong train—I read the code-symbol wrong."

Annamarie giggled. "Then what shall we do—see where this takes us or go back?"

"Get out and go back, of course," grumbled Stanton, rising and dragging her to her feet.

The car was slowing again for another station. They could get out, emerge to

the surface, cross over, and take the return train to the library.

Only the robot wouldn't let them.

For as the car was slowing, the robot rose to its feet and stalked over to the door. "What's up?" Stanton whispered in a thin, nervous voice. Annamarie prudently got behind him.

"We're getting out here anyhow," she said. "Maybe it won't follow us."

But they didn't get out. For when the car had stopped, and the door relays clicked, the robot shouldered the humans aside and stepped to the door.

But instead of exiting himself, the robot grasped the edge of the door in his steel tentacles, clutched it with all his metal muscles straining, and held it shut!

"DAMNED if I can understand it," said Stanton. "It was the most uncanny thing—it held the door completely and totally shut there, but it let us get out as peaceful as playmates at the next stop. We crossed over to come back, and while we were waiting for a return car I had time to dope out the station number. It was seventh from the end of the line, and the branch was new to me. So we took the return car back to the museum. The same thing happened on the trip back—robot in the car; door held shut."

"Go on," said Ogden Josey, Roëntgenologist of the expedition. "What happened then?"

"Oh. We just went back to the library, took a different car, and here we are."

"Interesting," said Josey. "Only I don't believe it a bit."

"No?" Annamarie interrupted, her eyes narrowing. "Want to take a look?"

"Sure."

"How about tomorrow morning?"

"Fine," said Josey. "You can't scare me. Now how about dinner?"

He marched into the mess hall of the expedition base, a huge rotunda-like affair that might have been designed for anything by the Martians, but was given its present capacity by the explorers because it contained tables and chairs enough for a regiment. Stanton and Annamarie lagged behind

"What do you plan to do tomorrow?" Stanton inquired. "I don't see the point of taking Josey with us when we go to look the situation over again."

"He'll come in handy," Annamarie promised. "He's a good shot."

"A good shot?" squawked Stanton. "What do you expect we'll have to shoot at?"

But Annamarie was already inside the building.

CHAPTER TWO

Descent Into Danger

"HEY, sand-man!" hissed Annamarie. "Be right there," sleepily said Stanton. "This is the strangest date I ever had." He appeared a moment later dressed in the roughest kind of exploring kit.

The girl raised her brows. "Expect to go mountain-climbing?" she asked.

"I had a hunch," he said amiably.

"So?" she commented. "I get them too. One of them is that Josey is still asleep. Go rout him out."

Stanton grinned and disappeared into Josey's cubicle, emerging with him a few moments later. "He was sleeping in his clothes," Stanton explained. "Filthy habit."

"Never mind that. Are we all heeled?" Annamarie proudly displayed her own pearl-handled pipsqueak of a mild paralyzer. Joseph produced a heat-pistol, while Stanton patted the holster of his five-pound blaster.

"Okay then. We're off."

The Martian subway service was excellent every hour of the day. Despite

the earliness, the trip to the central museum station took no more time than usual—a matter of minutes.

Stanton stared around for a second to get his bearings, then pointed. "The station we want is over there—just beyond the large pink monolith. Let's go."

The first train in was the one they wanted. They stepped into it, Josey leaping over the threshold like a startled fawn. Nervously he explained, "I never know when one of those things is going to snap shut on my—my cape." He yelped shrilly: "What's *that?*"

"Ah, I see the robots rise early," said Annamarie, seating herself as the train moved off. "Don't look so disturbed, Josey—we told you one would be here, even if you didn't believe us."

"We have just time for a spot of breakfast before things should happen," announced Stanton, drawing canisters from a pouch on his belt. "Here—one for each of us." They were filled with a syrup that the members of the Earth expedition carried on trips such as this—concentrated amino acids, fibrinogen, minerals and vitamins, all in a sugar solution.

Annamarie Hudgins shuddered as she downed the sticky stuff, then lit a cigarette. As the lighter flared the robot turned his head to precisely the angle required to centre and focus its eyes on the flame, then eye-fronted again.

"Attracted by light and motion," Stanton advised scientifically. "Stop trembling, Josey, there's worse to come. Say, is this the station?"

"It is," said Annamarie. Now watch. These robots function smoothly and fast—don't miss anything."

The metal monster, with a minimum of waste motion, was doing just that. It had clumped over to the door; its monstrous appendages were fighting the relays that were to drive the door open, and the robot was winning. The robots were built to win—powerful, even by Earthly standards.

Stanton rubbed his hands briskly and tackled the robot, shoving hard. The girl laughed sharply. He turned, his face showing injury. "Suppose you help," he suggested with some anger. "I can't move this by myself."

"All right—heave!" gasped the girl, complying.

"Ho!" added Josey unexpectedly, adding his weight.

"No use," said Stanton. "No use at all. We couldn't move this thing in seven million years." He wiped his brow. The train started, then picked up speed. All three were thrown back as the robot carelessly nudged them out of its way as it returned to its seat.

"I think," said Josey abruptly, "we'd better go back by the return car and see about the other side of the station."

"No use," said the girl. "There's a robot on the return too."

"Then let's walk back," urged Josey. By which time the car had stopped at the next station. "Come on," said Josey, stepping through the door with a suspicious glance at the robot.

"No harm in trying," mused Stanton as he followed with the girl. "Can't be more than twenty miles."

"And that's easier than twenty Earth miles," cried Annamarie. "Let's go"

"I don't know what good it will do, though," remarked Stanton, ever the pessimist. "These Martians were thorough. There's probably a robot at every entrance to the station, blocking the way. *If* they haven't sealed up the entrances entirely."

THERE was no robot at the station, they discovered several hours and about eight miles later. But the entrance to the station that was so thoroughly and mysteriously guarded was—no more. Each entrance was sealed; only the glow-

ing teardrop pointers remained to show where the entrance had been.

"Well, what do we do now?" groaned Josey, rubbing an aching thigh.

Stanton did not answer directly. "Will you look at that," he marvelled, indicating the surrounding terrain. The paved ground beneath them was seamed with cracks. The infinitely tough construction concrete of the Martians was billowed and rippled, stuck through with jagged ends of metal reinforcing I-beams. The whole scene gave the appearance of total devastation—as though a natural catastrophe had come along and wrecked the city first; then the survivors of the disaster, petulantly, had turned their most potent forces on what was left in sheer disheartenment.

"Must have been bombs," suggested the girl.

"Must have been," agreed the archaeologist. "Bombs and guns and force beams and Earth—Marsquakes, too."

"You didn't answer his question, Ray," reminded Annamarie. "He said: 'What do we do now?' "

"I was just thinking about it," he said, eyeing one of the monolithic buildings speculatively. "Is your Martian as good as mine? See if you can make out what that says."

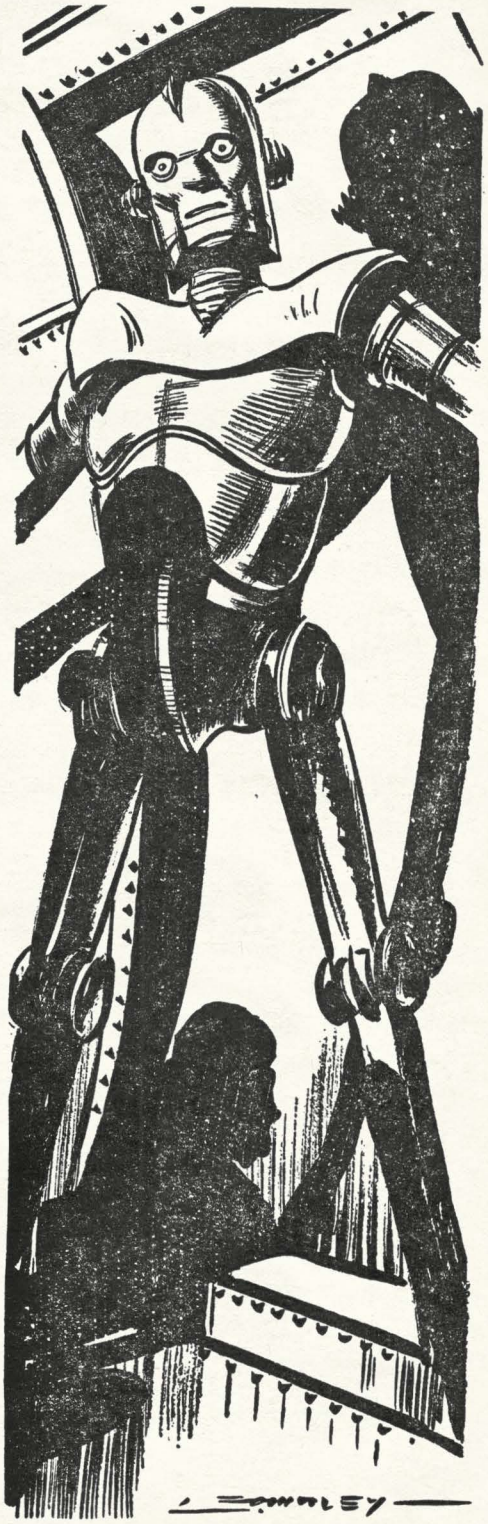
"That" was a code-symbol over the sole door to the huge edifice. "I give up," said Annamarie with irritation. "What does it say."

"Powerhouse, I think."

"Powerhouse? Powerhouse for what? All the energy for lighting and heating the city comes from the sun, through the mirrors up on the surface. The only thing they need power for down here—the only thing—Say!"

"That's right," grinned Stanton. "It must be for the Mars-Tube. Do you suppose we could find a way of getting from that building into the station?"

"There's only one way to find out,"



Annamarie parroted, looking for Josey for confirmation. But Josey was no longer around. He was at the door to the building, shoving it open. The others hastened after him.

CHAPTER THREE

Pursuit

"DON'T wiggle, Annamarie," whispered Josey plaintively. "You'll fall on me."

"Shut up," she answered tersely; "shut up and get out of my way." She swung herself down the Martian-sized manhole with space to spare. Dropping three feet or so from her hand-hold on the lip of the pit, she alighted easily. "Did I make much noise?" she asked.

"Oh, I think Krakatoa has been louder when it went off," Stanton replied bitterly. "But those things seem to be deaf."

The three stood perfectly still for a second, listening tensely for sounds of pursuit. They had stumbled into a nest of robots in the powerhouse, apparently left there by the thoughtful Martian race to prevent entrance to the mysteriously guarded subway station via this route. What was in that station that required so much privacy? Stanton wondered. Something so deadly dangerous that the advanced science of the Martians could not cope with it, but was forced to resort to quarantining the spot where it showed itself? Stanton didn't know the answers, but he was very quiet as a hidden upsurge of memory strove to assert iself. Something that had been in the bobbin-books . . . "The Under-Eaters". That was it. Had they anything to do with this robot *cordon sanitaire?*

The robots had not noticed them, for which all three were duly grateful. Ogden nudged the nearest to him—it happened to be Annamarie—and thrust out a bony finger. "Is *that* what the Mars-Tube looks like from inside?" he hissed piercingly.

As their eyes became acclimated to the gloom—they dared use no lights—the others made out the lines of a series of hoops stretching out into blackness on either side ahead of them. No lights anywhere along the chain of rings; no sound coming from it.

"Maybe it's a deserted switch line, one that was abandoned. That's the way the Tube ought to look, all right, only with cars going along it," Stanton muttered.

"Hush!" it was Annamarie. "Would that be a car coming—from the left, way down?"

Nothing was visible, but there was the faintest of sighing sounds. As though an elevator car, cut loose from its cable, were dropping down its shaft far off there in the distance. "It sounds like a car," Stanton conceded. "What do you think, Og—Hey! Where's Josey?"

"He brushed me, going toward the Tube. Yes—there he is! See him? Bending over between those hoops!"

"We've got to get him out of there! Josey!" Stanton cried, forgetting about the robots in the light of this new danger. "Josey! Get out of the Tube! There's a train coming!"

The dimly visible figure of the Roëntgenologist straightened and turned toward the others querulously. Then as the significance of that rapidly mounting *hiss-s-s-s* became clear to him, he leaped out of the tube, with a vast alacrity. A split second later the hiss had deepened to a high drone, and the bulk of a car shot past them, traveling eerily without visible support, clinging to and being pushed by the intangible fields of force that emanated from the metal hoops of the Tube.

Stanton reached Josey's form in a single bound. "What were you trying to do, imbecile?" he grated. "Make an early widow of your prospective fiancée?"

Josey shook off Stanton's grasp with

dignity. "I was merely trying to establish that that string of hoops was the Mars-Tube, by seeing if the power-leads were connected with the rings. It—uh, it was the Tube; that much is proven," he ended somewhat lamely.

"Brilliant man!" Stanton started to snarl, but Annamarie's voice halted him. It was a very small voice.

"You loud-mouths have been very successful in attracting the attention of those animated pile-drivers," she whispered with the very faintest of breaths. "If you will keep your lips zipped for the next little while maybe the robot that's staring at us over the rim of the pit will think we're turbo-generators or something and go away. Maybe!"

Josey swiveled his head up and gasped. "It's there—it's coming down!" he cried. "Let's leave here!"

THE three backed away toward the tube, slowly, watching the efforts of the machine-thing to descend the precipitous wall. It was having difficulties, and the three were beginning to feel a bit better, when—

Annamarie, turning her head to watch where she was going, saw and heard the cavalcade that was bearing down on them at the same time and screamed shrilly. "Good Lord—the cavalry!" she yelled. "Get out your guns!"

A string of a dozen huge, spider-shaped robots of a totally new design were charging down at them, running swiftly along the sides of the rings of the Tube, through the tunnel. They carried no weapons, but the three soon saw why,—from the ugly snouts of the egg-shaped bodies of the creatures protruded a black cone. A blinding flash came from the cone of the first of the new arrivals; the aim was bad, for overhead a section of the cement roof flared ghastly white and commenced to drip.

Annamarie had her useless paralyzer out and firing before she realized its uselessness against metal beings with no nervous systems to paralyze. She hurled it at the nearest of the new robots in a highly futile gesture of rage.

But the two men had their more potent weapons out and firing, and were taking a toll of the spider-like monstrosities. Three or four of them were down, partially blocking the path of the oncoming others; another was missing all its metal legs along one side of its body, and two of the remainder showed evidence of the accuracy of the Earthmen's fire.

But the odds were still extreme, and the built-in blasters of the robots were coming uncomfortably close.

Stanton saw that, and shifted his tactics. Holstering his heavy blaster, he grabbed Annamarie and shoved her into the Mars-Tube, crying to Josey to follow. Josey came slowly after them, turning to fire again and again at the robots, but with little effect. A quick look at the charge-dial on the butt of his heat-gun showed why; the power was almost exhausted.

He shouted as much to Stanton. "I figured that would be happening—now we run!" Stanton cried back, and the three sped along the Mars-Tube, leaping the hoops as they came to them.

"What a time for a hurdle race!" gasped Annamarie, bounding over the rings, which were raised about a foot from the ground. "You'd think we would have known better than to investigate things that're supposed to be private."

"Save your breath for running," panted Josey. "Are they following us in here?"

Stanton swivelled his head to look, and a startled cry escaped him. "They're following us—but look!"

The other two slowed, then stopped running altogether and stared in wonder. One of the robots had charged into the Mars-Tube—and had been levitated! He

was swinging gently in the air, the long metal legs squirming fiercely, but not touching anything.

"How—?"

"They're metal!" Annamarie cried. "Don't you see—they're metal, and the hoops are charged. They must have some of the same metal as the Tube cars are made of in their construction—the force of the hoops acts on them too!"

That seemed to be the explanation. . . . "Then we're safe!" gasped Josey, staggering about, looking for a place to sit.

"Not by a long shot! Get moving again!" And Stanton set the example.

"You mean because they can still shoot at us?" Josey cried, following Stanton's dog-trot nonetheless. "But the can't aim the guns—they seem to be built in, only capable of shooting directly forward."

"Very true," gritted Stanton. "But have you forgotten that this subway is in use? According to my calculations, there should be another car along in about thirty seconds or less—and please notice, there isn't any by-path anymore. It stopped back a couple of hundred feet. If we get caught here by a car, we get mashed. So—unless you want to go back an sign an armistice with the robots? I thought not—so we bettter keep going. Fast!"

THE three were lucky—very lucky. For just when it seemed certain that they would have to run on and on until the bullet-fast car overtook them, or go back and face the potent weapons of the guard robots, a narrow crevice appeared in the side of the tunnel-wall. The three bolted into it and slumped to the ground.

CRASH!

"What was that?" cried Annamarie.

"That," said Josey slowly, "was what happens to a robot when the fast express comes by. Just thank God it wasn't us."

Stanton poked his head gingerly into the Mars-Tube and stared down. "Say," he muttered wonderingly, "when we wreck something we do it good. We've ripped out a whole section of the hoops—by proxy, of course. When the car hit the robot they were both smashed to atoms, and the pieces knocked out half a dozen of the suspension rings. I would say, offhand, that this line has run its last train."

"Where do you suppose this crevice leads?" asked Annamarie, forgetting the damage that couldn't be undone.

"I don't know. The station ought to be around here somewhere—we were running toward it. Maybe this will lead us into the station if we follow it. If it doesn't, maybe we can drill a tunnel from here to the station with my blaster."

Drilling wasn't necessary. A few feet in, the scarcely passable crevice widened into a broad fissure, through which a faint light was visible. Exploration revealed that the faint light came from a wall-chart showing the positions and destinations of the trains. The chart was displaying the symbol of a Zeta train—the train that would never arrive.

"Very practical people, we are," Annamarie remarked with irony. "We didn't think to bring lights."

"We never needed them anywhere else on the planet—we can't be blamed too much. Anyway, the code-panel gives us a little light."

By the steady, dim red glow cast by the code-panel, the three could see the anteroom fairly clearly. It was disappointing. For all they could tell, there was no difference between this and any other station on the whole planet. But why all the secrecy? The dead Martians surely had a reason for leaving the guard-robots so thick and furious. But what was it?

Stanton pressed an ear to the wall of the anteroom. "Listen!" he snapped. "Do you hear—?"

"Yes," said the girl at length. "Scuffling noises—a sort of gurgling too, like

running water passing through pipes."

"Look there!" wailed Josey.

"Where?" asked the archaeologist naturally. The dark was impenetrable. Or was it? There was a faint glimmer of light, not a reflection from the code-panel, that shone through a continuation of the fissure. It came, not from a single source of light, but from several, eight or ten at least. The lights were bobbing up and down. "I'd swear they were walking!" marvelled Ray.

"Ray" shrieked the girl faintly. As the lights grew nearer, she could see what they were—pulsing domes of a purplish glow that ebbed and flowed in tides of dull light. The light seemed to shine from behind a sort of membrane, and the outer surfaces of the membrane were marked off with faces—terrible, savage faces, with carnivorous teeth projecting from mouths that were like ragged slashes edged in writhing red.

"Ray!" Annamarie cried again. "Those lights—they're the luminous heads of living creatures!"

"God help us—you're right!" Stanton whispered. The patterns of what he had read in the bobbin-books began to form a whole in his mind. It all blended in—"Under-Eaters," "Fiends from Below," "Raging Glows." Those weirdly cryptic terms could mean nothing else but these creatures that were now approaching. And—"Good Lord!" Stanton ejaculated, feeling squeamishly sick. "Look at them—they look like human beings!"

IT WAS true. The resemblance was not great, but the oncoming creatures did have such typically Terrestrial features as hairless bodies, protruding noses, small ears, and so forth, and did not have the unmistakable hour-glass silhouette of the true Martians.

"Maybe that's why the Martians feared and distrusted the first Earthmen they saw. They thought we were related to

these—things!" Stanton said thoughtfully.

"Mooning over it won't help us now," snapped Annamarie. "What do we do to get away from them? They make me nervous!"

"We don't do anything to get away. What could we do? There's no place to go. We'll have to fight—get out your guns!"

"Guns!" sneered Josey. "What guns? Mine's practically empty, and Annamarie threw hers away!"

Stanton didn't answer, but looked as though a cannon-shell had struck him amidships. Grimly he drew out his blaster. "Then this one will have to do all of us," was all he said. "If only these accursed blasters were'nt so unmanageable — there's at least an even chance that a bad shot will bring the roof down on us. Oh, well—I forgot to mention," he added casually, "that, according to the records, the reason that the true Martians didn't like these things was that they had the habit of *eating* their victims. Bearing that in mind, I trust you will not mind my chancing a sudden and unanimous burial for us all." He drew the blaster and carefully aimed it at the first of the oncoming group. He was already squeezing the trigger when Josey grabbed his arm. "Hold on, Ray!" Josey whispered. "Look what's coming."

The light-headed ones had stopped their inexorable trek toward the Terrestrials. They were bunched fearfully a few yards within the fissure, staring beyond the three humans, into the Mars-Tube.

Three of the spider-robots, the Tube-tenders, were there. Evidently the destruction of one of their number, and the consequent demolition of several of the hoops, had short-circuited this section of the track so that they could enter it and walk along without fear.

There was a deadly silence that lasted for a matter of seconds. The three from Earth cowered as silently as possible where they were, desirous of attracting absolutely no attention from either side. Then—Armageddon!

The three robots charged in, abruptly, lancing straight for the luminous-topped bipeds in the crevasse. Their metal legs stamped death at the relatively impotent organic creatures, trampling their bodies until they died. But the cave-dwellers had their methods of fighting too; each of them carried some sort of instrument, hard and heavy-ended, with which they wreaked havoc on the more delicate parts of the robots.

More and more "Raging Glows" appeared from the crevasse, and it seemed that the three robots, heavily outnumbered, would go down to a hard-fought but inevitable "death"—if that word could be applied to a thing whose only life was electromagnetic. Already there were better than a score of the strange bipeds in the cavern, and destruction of the metal creatures seemed imminent.

"Why don't the idiotic things use their guns?" Annamarie shuddered.

"Same reason I didn't—the whole roof might come down. Don't worry—they're doing all right. Here come some more of them."

True enough. From the Mars-Tube emerged a running bunch of the robots —ten or more of them. The slaughter was horrible—a carnage made even more unpleasant by the fact that the dimness of the cavern concealed most of the details. The fight was in comparative silence, broken only by the faint metallic clattering of the workings of the robots, and an occasional thin squeal from a crushed biped. The cave-dwellers seemed to have no vocal organs.

The robots were doing well enough even without guns. Their method was simply to trample and bash the internal organs of their opponents until the opponent had died. Then they would kick

the pulped corpse out of the way and proceed to the next.

The "Hot-Heads" had had enough. They broke and ran back down the tunnel from which they had come. The metal feet of the robots clattered on the rubble of the tunnel-floor as they pursued them at maximum speed. It took only seconds for the whole of the ghastly running fight to have traveled so far from the humans as to be out of sight and hearing. The only remnants to show it had ever existed were the mangled corpses of the cave-dwellers, and one or two wrecked robots.

Stanton peered after the battle to make sure it was gone. Then, mopping his brow, he slumped to a sitting position and emitted a vast "Whew!" of relief. "I have seldom been so sure I was about to become dead," he said pensively. "Divide and rule is what I always say—let your enemies fight it out among themselves. Well, what do we do now? My curiosity is sated—let's go back."

"That," said the girl sternly, "is the thing we are most not going to do. If we've come this far we can go a little farther. Let's go on down this tunnel and see what's there. It seems to branch off down farther: we can take the other route from that of the robots."

Josey sighed. "Oh, well," he murmured resignedly. "Always game, that's me. Let's travel."

"IT'S darker than I ever thought darkness could be, Ray," Annamarie said tautly. "And I just thought of something. How do we know *which* is the other route —the one the robots didn't take?"

"A typical question," snarled Stanton. "So you get a typical answer: I don't know. Or, to phrase it differently, we just have to put ourselves in the robots' place. If you were a robot, where would you go?"

"Home," Ogden answered immediately. "Home and to bed. But these robots took the tunnel we're in. So let's turn back and take the other one."

"How do you know?"

"Observation and deduction. I observed that I am standing in something warm and squishy, and I deduced that it is the corpse of a recent light-head."

"No point in taking the other tunnel, though," Annamarie's voice floated back. She had advanced a few steps and was hugging the tunnel wall. "There's an entrance to another tunnel here, and it slopes back the way we came. I'd say, offhand, that the other tunnel is just an alternate route."

"Noise," said Stanton. "Listen."

There was a scrabbling, chittering, quite indescribable sound, and then another one. Suddenly terriffic squalling noises broke the underground silence and the three ducked as they sensed something swooping down on them and gliding over their heads along the tunnel.

"What was that?" yelped Josey.

"A cat-fight, I think," said Stanton. "I could hear two distinct sets of vocables, and there were sounds of battle. Those things could fly, glide or jump—probably jump. I think they were a specialized form of tunnel life adapted to living, breeding, and fighting in a universe that was long, dark, and narrow. Highly specialized."

Annamarie giggled hysterically. Like the bread-and-butterfly that lived on weak tea with cream in it."

"Something like," Stanton agreed.

Hand in hand, they groped their way on through the utter blackness. Suddenly there was a grunt from Josey, on the extreme right. "Hold it" he cried, withdrawing his hand to finger his damaged nose. "The tunnel seems to end here."

"Not end," said Annamarie. "Just turns to the left. And take a look at what's there!"

The men swerved and stared. For a

second no one spoke; the sudden new vista was too compelling for speech.

"RAY!" finally gasped the girl. "It's incredible! It's *incredible!*"

There wasn't a sound from the two men at her sides. They had rounded the final bend in the long tunnel and come out into the flood of light they had seen. The momentary brilliance staggered them and swung glowing spots before their eyes.

Then, as the effects of persistence of vision faded, they saw what the vista actually was. It was a great cavern, the hugest they'd ever seen on either planet —and by tremendous odds the most magnificent.

The walls were not of rock, it seemed, but of slabs of liquid fire—liquid fire which, their stunned eyes soon saw, was a natural inlay of incredible winking gems.

Opulence was the rule of this drusy cave. Not even so base a metal as silver could be seen here; gold was the basest available. Platinum, iridium, little pools of shimmering mercury dotted the jewel-studded floor of the place. Stalactites and stalagmites were purest rock-crystal.

Flames seemed to glow from behind the walls colored by the emerald, ruby, diamond, and topaz. "How can such a formation occur in nature?" Annamarie whispered. No one answered.

" 'There are more things in heaven and under it—' " raptly misquoted Josey. Then, with a start, "What act's that from?"

It seemed to bring the others to. "Dunno," chorused the archeologist and the girl. Then, the glaze slowly vanishing from their eyes, they looked at each other.

"Well," breathed the girl.

In an abstracted voice, as though the vision of the jewels had never been seen, the girl asked, "How do you suppose the place is lighted?"

"Radioactivity," said Josey tersely. There seemed to be a tacit agreement—if one did not mention the gems neither would the others. "Radioactive minerals and maybe plants. All this is natural formation. Weird, of course, but here it is."

There was a feeble, piping sound in the cavern.

"Can this place harbor life?" asked Stanton in academic tones.

"Of course," said Josey, "any place can." The thin, shrill piping was a little louder, strangely distorted by echoes.

"Listen," said the girl urgently. "Do you hear what I hear?"

"Of course not" cried Stanton worriedly. "It's just my—I mean our imagination. I can't be hearing what I think I'm hearing."

Josey had pricked his ears up. "Calm down, both of you," he whispered. "If you two are crazy—so am I. That noise is something—somebody—singing Gilbert and Sullivan. 'A Wand'ring Minstrel, I', I believe the tune is."

"Yes," said Annamarie hysterically. "I always liked that number." Then she reeled back into Stanton's arms, sobbing hysterically.

"Slap her," said Josey, and Stanton did, her head rolling loosely under the blows. She looked up at him.

"I'm sorry," she said, the tears still on her cheeks.

"I'm sorry too," echoed a voice, thin, reedy, and old; "and I suppose you're sorry. Put down your guns. Drop them. Put up your hands. Raise them. I really am sorry. After all, I don't *want* to kill you."

CHAPTER FOUR

Marshall Ellenbogan

THEY turned and dropped their guns almost immediate, Stanton shrugging off the heavy power-pack harness of his

blaster as Josey cast down his useless heat-pistol. The creature before them was what one would expect as a natural complement to this cavern. He was weird, pixyish, dressed in fantastic points and tatters, stooped, wrinkled, whiskered, and palely luminous. *Induced radioactivity,* Stanton thought.

"Hee," he giggled. "Things!"

"We're men," said Josey soberly. "Men like—like you." He shuddered.

"Lord," marveled the pixy to himself, his gun not swerving an inch. "What won't they think of next! Now, now, you efts—you're addressing no puling creature of the deep. I'm a man and proud of it. Don't palter with me. You shall die and be reborn again—eventually, no doubt. I'm no agnostic, efts. Here in this cavern I have seen—oh the things I have seen." His face was rapturous with holy bliss.

"Who are you?" asked Annamarie.

The pixy started at her, then turned to Josey with a questioning look. "Is your friend all right?" the pixy whispered confidentially. "Seems rather effeminate to me."

"Never mind," the girl said hastily. "What's your name?"

"Marshall Ellenbogan," said the pixy surprisingly. Second lieutenant in the United States Navy. But," he snickered, "I suspect my commission's expired."

"If you're Ellenbogan," said Stanton, "then you must be a survivor from the first Mars expedition. The one that started the war."

"Exactly," said the creature. He straightened himself with a sort of somber dignity. "You can't know," he groaned, "you never could know what we went through. Landed in a desert. Then we trekked for civilization—all of us, except three kids that we left in the ship. I've often wondered what happened to them." He laughed. "Civilization! Cold-blooded killers who tracked us down like vermin. Killed Kelly. Keogh. Moley. Jumped on us and killed us—like that" He made a futile attempt to snap his fingers. "But not me—not Ellenbogan—I ducked behind a rock and they fired on the rock and rock and me both fell into a cavern. I've wandered—Lord! how I've wandered. How long ago was it, efts?"

The lucid interval heartened the explorers. "Fifty years, Ellenbogan," said Josey. "What did you live on all that time?"

"Moss—fruits from the big white trees. Meat now and then, eft, when I could shoot one of your light-headed brothers." He leered. "But I won't eat you. I haven't tasted meat for so long now . . . Fifty years. That makes me seventy years old. You efts never live for more than three or four years, you don't know how long seventy years can be."

"We aren't efts," snapped Stanton. "We're human beings same as you. I swear we are! And we want to take you back to Earth where you can get rid of that poison you've been soaking into your system! Nobody can live in a radium-impregnated cave for fifty years and still be healthy. Ellenbogan, for God's sake be reasonable!"

The gun did not fall nor waver. The ancient creature regarded them shrewdly, his head cocked to one side. "Tell me what happened," he said at length.

"THERE was a war," said the girl. "It was about you and the rest of the expedition that had been killed. When yours didn't come back, the Earth governments sent another expedition—armed this time, because the kids you left in the ship managed to raise Earth for a short time when they were attacked, and they told the whole story. The second expedition landed, and—well, it's not very clear. We only have the ship's log to go by, but it seems to have been about the same with them. Then the Earth governments

raised a whole fleet of rocketships, with everything in the way of guns and ray-projectors they could hold installed. And the Martians broke down the atomic-power process from one of the Earth ships they'd captured, and *they* built a fleet. And there was a war, the first interplanetary war in history, and maybe the fiercest war in history, too, for neither side ever took prisoners. There's some evidence that the Martians realized they'd made a mistake at the beginning after the war had been going only about three years, but by that time it was too late to stop. And it went on for fifty years, with rocket-ships getting bigger and faster and better, and new weapons being developed . . . Until finally we developed a mind-disease that wiped out the entire Martian race in half a year. They were telepathic, you know, and that helped spread the disease."

"Good for them," snarled the elder. "Good for the treacherous, devilish, double-dealing rats . . . And what are you people doing here now?"

"We're an exploring party, sent by the new all-Earth confederation to examine the ruins and salvage what we can of their knowledge. We came on you here quite by accident. We haven't got any evil intentions.We just want to take you back to your own world. You'll be a hero there. Thousands will cheer you—millions. Ellenbogan, put down your gun. Look—we put ours down!"

"Hah!" snarled the pixy, retreating a pace. "You had me going for a minute. But not any more!" With a loud click, the pixy thumbed the safety catch of his decades-old blast. He reached back to the power pack he wore across his back, which supplied energy for the weapon, and spun the wheel to maximum output. The power-pack was studded with rubies which, evidently, he had hacked with diamonds into something resembling finished, faceted stones.

"WAIT a minute, Ellenbogan," Stanton said desperately. "You're the king of these parts, aren't you? Don't you want to keep us for subjects?"

"Monarch of all I survey, eft. Alone and undisputed." His brow wrinkled. "Yes, eft," he sighed, "you are right. You efts are growing cleverer and cleverer—you begin almost to understand how I feel. Sometimes a king is lonely—sometimes I long for companionship—on a properly deferential plane, of course. Even you efts I would accept as my friends if I did not know that you wanted no more than my blood. I can never be the friend of an eft. Prepare to die."

Josey snapped: "Are you going to kill the girl, too?"

"Girl?" cried the pixy in amazement. "What girl?" His eyes drifted to Annamarie Hudgins. "Bless me" he cried, his eyes bulging, "why, so he is! I mean, she is! That would explain it, of course, wouldn't it?"

"Of course," said Stanton. "But you're not going to kill her, are you?"

"If she were an eft," mused the pixy, "I certainly would. But I'm beginning to doubt that she is. In fact, you're probably all almost as human as I am. However—" He mistily surveyed her.

"Girl," he asked dreamily, "do you want to be a queen?"

"Yes, sir," said Annamarie, preventing a shudder. "Nothing would give me more pleasure."

"So be it," said the ancient, with great decision. "So be it. The ceremony of coronation can wait till later, but you are now ex officio my consort."

"That is splendid," cried Annamarie, "simply splendid." She essayed a chuckle of pleasure, but which turned out to be a dismal choking sound. "You've—you've made me positively the happiest woman under Mars."

She walked stiffly over to the walking monument commemorating what had once

been a man, and kissed him gingerly on the forehead. The pixy's seamed face glowed for more reasons than the induced radioactivity as Stanton stared in horror.

"The first lesson of a queen is obedience," said the pixy fondly, "so please sit there and do not address a word to these unfortunate former friends of yours. They are about to die."

"Oh" pouted Annamarie. "You are cruel, Ellenbogan."

He turned anxiously, though keeping the hair-trigger weapon full on the two men. "What troubles you, sweet?" he demanded. "You have but to ask and it shall be granted. We are lenient to our consort."

The royal "we" already thought Stanton. He wondered if the ancient would be in the market for a coat of arms. Three years of freehand drawing in his high school in Cleveland had struck Stanton as a dead waste up till now; suddenly it seemed that it might save his life.

"How," Annamarie was complaining, "can I be a *real* queen without any subjects?"

The pixy was immediately suspicious, but the girl looked at him so blandly that his ruffles setted down. He scratched his head with the hand that did not hold the blaster. "True," he admitted. "I hadn't thought of that. Very well, you may have a subject. One subject."

"I think two would be much nicer," Annamarie said a bit worriedly, though she retained the smile.

"One!"

"Please—two?"

"One! One is enough. Which of these two shall I kill?"

Now was the time to start the sales-talk about the coat-of-arms, thought Stanton. But he was halted in mid-thought, the words unformed, by Annamarie's astonishing actions. Puckering her brow so very daintily, she stepped over to the pixy and slipped an arm about his waist. "It's hard to decide," she remarked languidly, staring from one to the other, still with her arm about the pixy. "But I think—

"Yes. I think—kill *that* one." And she pointed at Stanton.

STANTON didn't stop to think about what a blaster could do to a promising career as artist by appointment to Mars' only monarch. He jumped—lancing straight as a string in the weak Martian gravity, directly at the figure of the ancient. He struck and bowled him over. Josey, acting a second later, landed on top of him, the two piled onto the pixy's slight figure. Annamarie, wearing a twisted smile, stepped aside and watched quite calmly.

Oddly enough, the pixy had not fired the blaster.

After a second, Stanton's voice came smotheredly from the wriggling trio. He

was addressing Josey. "Get up, you oaf," he said. "I think the old guy is dead."

Josey clambered to his feet, then knelt again to examine Ellenbogan. "Heart-failure, I guess," he said briefly. "He was pretty old."

Stanton was gently prodding a swelling eye. "Your fault, idiot," he glared at Josey. "I doubt that one of your round-house swings touched Ellenbogan. And as for you, friend," he sneered, turning to Annamarie, "you have my most heart-felt sympathies. Not for worlds would I have made you a widow so soon. I apologize," and he bowed low, recovering himself with some difficulty.

"Did it ever occur to you," Annamarie said tautly—Stanton was astounded as he noticed she was trembling with a nervous reaction,—"did it ever occur to you that maybe you owe me something? Because if I hadn't disconnected his blaster from the power-pack, you would be—"

Stanton gaped as she turned aside to hide a flood of sudden tears, which prevented her from completing the sentence. He dropped to one knee and ungently turned over the old man's body. Right enough—the lead between power-pack and gun was dangling loose, jerked from its socket. He rose again and, staring at her shaking figure, stepped unsteadily toward her.

Josey, watching them with scientific impersonality, up-curled a lip in the beginnings of a sneer. Then suddenly the sneer died in birth, and was replaced by a broad smile. "I've seen it coming for some time," more loudly than was necessary, "and I want to be the first to congratulate you. I hope you'll be very happy," he said. . . .

A few hours later, they stared back at the heap of Earth under which was the body of the late Second Lieutenant Ellenbogan, U.S.N., and quietly made their way toward the walls of the cavern. Choosing a different tunnel-mouth for the attempt, they began the long trek to the surface. Though at first Stanton and Annamarie walked hand-in-hand, it was soon arm-in-arm, then with arms around each other's waists, while Josey trailed sardonically behind.

THE END

The First Time Machine

IN 1791 the Englishman, Joshua Steinwell, figured out a way to move time backwards. Steinwell had lost his wife in 1788 and believed that if time could be made to retreat he would find her again—say in 1780, when she was hale and hearty. The world too would profit, for modern science could be brought to the ancient Greeks and other historical nations, and historians could then study their actions at first hand. Two great civilizations would live hand in hand—or a dozen or a hundred at once, for that matter.

His theory was based on Earth's rotation on its axis, which causes day and night. If the Earth could be made to move in the opposite direction, Steinwell wrote, then tomorrow would become yesterday and a month from now would become a month ago. This, he reasoned, could be accomplished if a number of huge cannon could be fired off simultaneously in the same direction in which the Earth spun. The reaction of the shots would stop the Earth's rotation and even reverse it.

The experiment was never tried and Steinwell died broken-hearted at the age of 42 because no one would listen to his plan.

—Simpson M. Ritter.

Farewell To Fuzzies

The Fuzzies had been Wilson's only friends for six months. Their lives, it seemed, meant more to him than his own!

By Henry Hasse

CRAIG WILSON stood at the entrance of his portable iron shack and looked down the length of the narrow valley floor. On each side, perhaps fifty yards apart, the black serrated cliffs reached sheerly upward. Wilson's gaze swung up, beyond the lip of the cliff, and searched the blackness of space beyond. But there was no hope in his gaze. He really didn't expect to see the blast of a rocket-ship out there; he was beyond that now. This uncharted asteroid,-this twenty-mile rock, had been his world for—how long had it been?

He looked down at the wall of the iron shack, covered with rows of white chalk marks. Ostentatiously he drew a chunk of chalk from his pocket and placed another mark there. Then he laboriously counted them. Finished, he nodded as though satisfied. He stepped out, looked along the line of cliffs; then he cupped his hands to his mouth and called:

"Fuzzy-fuzzy-fuzzy!"

At the base of the cliffs were shallow little caves fronted by a sparse, pale vegetation. At Wilson's call, innumerable furry little animals stopped nibbling at the growth and came scampering to him; others left the caves and did likewise. Soon there were scores of them sitting in a semi-circle around the shack, staring up at him, a dawn of wonder in their large brown eyes and their big funny ears alert.

Wilson, looking down at the native "Fuzzies," gulped. He couldn't help it. Those eyes! They were almost human eyes! He had never quite gotten over that.

"Oog?" said one of them in the front row, meaning well what's it all about.

Wilson cleared his throat, remembering he had a little speech to make.

"My dear Fuzzies," he began. "My very dearest friends: I have been among you quite a while now. I like you, and I think you like me. But d'you know, I haven't been able to determine whether you are animals or people! In many of your actions you are very intelligent, sympathetic creatures; you always listen, enthralled, to the sound of my voice. I doubt if you ever know what I'm talking about, but I want you to know I'm grateful anyway; if it weren't for you I'd probably be stark, raging mad by now. But," he sighed, "you're *not* very good conversationalists. If only your vocabulary consisted of something besides that single solitary word!"

"Oog!" one of them said solemnly, meaning so sorry!

"That expresses my feelings exactly," Wilson replied. He turned and pointed to the chalk marks on the wall. "Look, Fuzzies! My calendar. Know what day this is? Anniversary! I've been stranded here six Earth months—well, I may be a few days wrong, but what's the difference—we're going to celebrate! For myself I'm going to open my last can of blackberry jam; and for *you*—well you didn't know I had six large bars of chocolate hidden away!" He stopped and smiled down on them. Months ago they had robbed him of all his sugar and most of his chocolate.

They continued to look wonderingly up at him. Then seeing he was finished, loud and many were the "Oogs" that sounded in the tenuous atmosphere; probably meaning chocolate! Lead us to it!

WILSON walked over to the space cruiser a few yards from the shack. It was battered and scarred, but still intact—except it had no rocket tubes! He entered, found the chocolate bars and broke them into tiny pieces. These he scattered out among the Fuzzies, who quickly confiscated them and scampered back to their caves.

Wilson stood there and watched the pitch-black shadow that crept the length of the chasm floor, swallowing up the sunlight. He had watched it numerous times before. That was due to the asteroid's axial rotation. When it reached the little promontory that jutted out from the cliff, the shadow would swallow the rest of the chasm in one sudden gulp. He continued to watch until this happened. There! That made his six months official.

He turned back into the cruiser, and clicked on the light. He frowned. The light seemed much dimmer than last time. He'd tried to conserve it, but the cruiser's tiny power plant was failing fast. And the utter *night* on this hellish world was about six times as long as the brief strip of

sunlight. Wilson hoped madness wouldn't come when the power plant failed. . . .

Quickly he opened his last can of jam, his last luxury. All that was left now were tinned sardines and beans. Lord, how sick he was of them—but how he wished he had more! He counted the cans and estimated he had enough for one more week, on half rations. He knew he wouldn't celebrate another six-month anniversary. . . .

When he had finished his frugal meal, he crouched under the dim light and opened his only book: Spurlin's *Advanced Principles of Space Navigation.* He tried to read, then cast it from him. Lord, he knew it by heart! He chuckled. If by some miracle he ever got off this rock, he could certainly pull down a first-class job with any of the Space Lines! He'd been a novice spaceman when all this started.

He shut off the current and lay there in the utter dark, remembering back. He was lucky at that! He'd found this deep chasm where the tenuous atmosphere clung. Up above, on the rugged surface, was sunlight—eternal sunlight if he wanted it. But he couldn't go up there any more, he'd used the last of the oxygen tanks. Besides he didn't want to. Up there, on the opposite side, lay five corpses who had been his friends. George Perrin, Matt something, and—Funny! He'd even forgotten the rest of their names! Anyway it didn't matter. There'd been no place to bury them, so he had covered them with heaps of rocks up there.

He did remember how they'd died, though; remembered vividly. He could still see that strange, black, blunt-nosed spaceship blasting up and away, leaving his five friends lying there in a little huddled group. It had been a single man, with an atom-blast pistol—ruthless. . . . From a ridge a little distance away Wilson had seen him load the last of their uranium in his black ship. Wilson had been away prospecting for another vein.

And when he rushed to their cruiser, vengeance in his brain, he saw that the black pirate had dismantled and stolen every rocket-tube with its precious fuel. . . .

Wilson had wandered, then, until sanity came again. He'd found this deep chasm with its precious pocket of air. He'd hauled their portable iron shack here, laboriously; and he'd rolled their rocket cruiser here, over half the surface of the asteroid. Those days of labor alone had prevented madness. And just before the last of the oxygen tanks was exhausted, he had hurried back to his friends and stripped them of their clothing—light-colored, mostly. He patched this together into a huge square, which he anchored up above near the lip of the chasm. Then, here below, on the floor of the chasm where the sunlight daily crept, he'd made a huge symbol of black rocks—a circle with a cross in it, the interplanetary signal for help. If any wandering spaceship saw that white square patch up there on the black surface, it would come closer to investigate; then it would be sure to see the distress signal down in the nearby chasm.

But that had been six months ago . . . and none had yet come. . . . Suddenly the awful utter darkness seemed to crush in upon Wilson like a living thing, cutting off his breath. In rising panicky terror he turned on the light again, the dim light, and once more tried to read. He wished the sunlight would hurry, the few hours of palely creeping sunlight. . . .

AGAIN Wilson stood in front of his shack. Again he called the Fuzzies to him, but now there was no humor in his voice and when he spoke it was a little wildly. It was a week later . . . for four days he had endured those long stretches of utter blackness bordering on madness. His power plant had failed.

And his food was gone. He waved an empty tin around his head as he shouted half deliriously:

"Look Fuzzies! The last of my grub! It was inevitable, but—what am I to do now? I might try that—that damned duffle-weed out there that you eat, but I don't think I'd like it. Or I might try . . . I—I might . . . yes, I'll have to. . . ."

His voice failed. He stared down at the semi-circle of them They stared ever so trustingly up at him. Then he wiped the sweat from his brow, as he staggered a little at the thought. Sure, he'd thought of that before! But not as a necessity. Now it was a necessity.

Maybe if he could manage to lure just a couple of them at a time behind that promontory of rock, away from the caves . . . they were so trusting. . . . But he knew how those eyes would look, those human eyes, and he knew he could never do it. And he remembered the first night when he'd stumbled down this chasm half dead with exhaustion, and he might have died from the cold save for these Fuzzies who had huddled around him giving him the warmth of their bodies until the sunlight came. . . .

Wilson suddenly found himself still looking down at all those Fuzzies who still stared wonderingly up at him waiting for him to continue his speech. Wilson was very hungry but he knelt on his knees and began to cry.

"I won't do it, oh God I can't do it," he cried. "Never. I'll starve first."

The Fuzzies had never seen him like this before. They moved restlessly, and the multitude of "Oogs" that surged out from them were sympathetic "Oogs"—but helpless. They knew Wilson was unhappy and they wished, from the very depths of their little hearts, that they could help.

Then, startlingly sudden, all their cries turned from sympathy to astonishment. They weren't staring at Wilson any more, they were staring upward. Wilson looked at them and then he stared upward too.

For one single instant he thought he had lapsed into delirium; and then he knew he hadn't Full sanity and clear concise thought came flowing back. He still knelt there and he continued to cry, but now he was praying too—a prayer of thanks for this miracle.

At last a space-ship had come.

SLOWLY Wilson rose to his feet and watched the spacer slowly descend—right into the chasm. As it settled, repulsion tubes still blasting, the Fuzzies scuttled back to their caves. Then a man stepped out.

As though from far away, Wilson heard the multitude of little "Oogs" from the caves, meaning what! Another of these tall creatures? What's our world coming to? And then Wilson was looking at the men who had stepped out.

And the man was looking at him. He didn't move away from his ship, he just stood there. He had an atom-blast pistol levelled at Wilson. . . .

Wilson didn't recognize the man. But he knew the ship. In a single stunning, horrified instant he knew it. A black ship. A strange black ship . . . and strangeness lying in the absurd, blunt nose. And the man held an atom-blast pistol. And up there on the surface of the asteroid lay five corpses. . . .

Wilson leaped wildly forward, weaponless, hands reaching out.

"Back! Back there!" the stranger called, centering the atom-pistol squarely on Wilson's leaping body.

From somewhere a shred of sanity came back to Wilson as he glimpsed that pistol. A remembrance. . . . He caught himself on his toes, stood poised a few yards away, hands clenching.

The stranger sneered. "I saw your signal up there. Clever! I came down

to investigate, all ready to rescue you. But you seem to know me. . . ."

"I do!" Wilson's voice was tense, he hardly opened his teeth.

The man nodded, his eyes narrowing. He stared around in the pale chasm sunlight, and saw Wilson's cruiser with the rocket-tubes missing. He moved over to it. His body tensed.

"Now I know you too!" he snapped. "I must have missed *you.* These big asteroids look all alike, it's funny I should stumble on the same one after six months! I've been over to Ceres for supplies. Going back to my base."

Wilson didn't say anything.

The man looked up at the rim of the cliff and smiled.

"Yes," Wilson grated, "you left five corpses up there!"

"Thanks! I wanted that confirmation. When you said that, mister, you sealed your death-warrant. I can't rescue you now, and I very obviously can't leave you here alive. There's the possibility of some other wandering spaceman descending to investigate your ingenious signals."

Wilson seemed to go limp all at once, mentally and physically. Somehow he didn't care any more. Rescue . . . death . . . it would all be the same, release. Release was all he wanted. So he wasn't surprised to hear his own voice say, devoid of any emotion:

"Okay. Might as well make a complete job of it . . . six instead of five." And he shrugged wearily. At the same time, with hardly any shock at all, he recognized the man as DeCreve, an outlaw once wanted on three worlds but now thought dead. Wilson recognized the thin, dark face with the little strip of mustache, and the white scar zagging down his left cheek. So—DeCreve wasn't dead. Wilson wished he'd hurry up and press the release button on that atom pistol.

DeCreve smiled, raised the pistol a little so it centered exactly on Wilson's chest. He started to press the button . . . and something at his feet said:

"Oog?"

DeCreve looked down. Wilson did too, dispassionately. One of the Fuzzies, a little bold and a little curious, hadn't retired to the caves with the others.

DECREVE, a sudden light of interest in his eyes, bent down and touched the Fuzzy with his finger, ruffling its fur. The Fuzzy scampered away out of reach.

They didn't like to be touched, Wilson knew that; their skin was tender or something.

But DeCreve had seen enough. He straightened up and his eyes were glowing. He looked at Wilson and laughed. "Well, this *is* my lucky day. Have you noticed the fur on those animals? Talk about chinchilla! Compared to these things, chinchilla fur is rough as a whisk broom! Many of 'em here?"

"A few hundred," Wilson said, his weary mind failing to grasp as yet what DeCreve was driving at.

DeCreve chuckled. "And me robbing you fellows of your uranium ore. Why, these animals are worth their weight in uranium! What a price they oughta bring on the fur market at Ceres! Too bad I have my ship full of supplies now. I think after I get rid of you I'll just leave your distress signal pat, and come back here pronto. . . ."

Wilson heard these words through a dawning comprehension. These Fuzzies were his friends! They'd saved his life once, and they had certainly saved his sanity later. Wilson suddenly wasn't dispassionate any more, and now he didn't want release—not at the end of an atom pistol. He didn't know how, but he wasn't going to let DeCreve come back here to butcher these Fuzzies, his friends!

And then Wilson saw the atom pistol still centered on him. He saw DeCreve still smiling thinly, watching him. . . .

With cold reason flowing back, Wilson began to talk. Later he didn't remember what he talked about, but he remembered he tried to keep his voice still dull and dispassionate. For Wilson realized only one thing: here in the sunlight, if DeCreve released that atom-blast button, he couldn't miss at that short distance. As he talked Wilson glanced over DeCreve's shoulder down along the chasm and saw the shadow creeping again, swallowing up the sunlight. When it reached the promontory where the chasm suddenly veered, the darkness would sweep over them in the space of a second. Then, and not until then, would he dare to take a chance at the pistol . . . but he judged the darkness wouldn't reach there for four or five minutes.

For four or five minutes that seemed a nightmare, Wilson talked. DeCreve answered leisurely, suspecting nothing. Wilson must have asked how he had escaped the Patrols which had looked everywhere for him—because he heard the outlaw answering willingly, even boastfully, in minutest detail.

"I don't mind telling you this," he heard DeCreve conclude arrogantly, "because you're not going to leave this rock alive."

Wilson nodded dully, but his brain was writhing. He asked another question. DeCreve answered. Wilson hardly heard, he was watching the swallowing darkness. Would it never come? Had the asteroid stopped in its rotation? It must have been five minutes already . . . ten minutes. Wilson felt curiously rooted there. He felt the palms of his hands moisten. He hoped DeCreve didn't notice his tenseness.

What was DeCreve saying?

"Well, it's been a nice visit, mister. Understand, there's nothing personal in this. I merely can't have anyone alive who's seen me out here—especially after what I've just told you. Now, if you've any last requests, within reason . . ."

"Yes, I do have," Wilson said very slowly. "Just one." He hesitated, glancing at the atom pistol in DeCreve's steady hand. Wilson didn't have a request at all. He was merely drawing out his life to the end of the last long thread, trying to gain every precious second now.

DeCreve waved the pistol impatiently and said: "Well?"

"It's—it's like this," Wilson went on hoarsely, not even knowing what he was going to say. . . .

BUT HE didn't have to say it. In that instant the darkness, complete and total, swept upon them. DeCreve was startled. He cursed and let his pistol blast out. But Wilson, awaiting the instant, had collapsed as though his legs were suddenly rubber. He felt the singing power of the beam as it passed perilously close to his shoulder. Then he was on his back. He sensed, rather than saw, DeCreve leaping forward. Wilson's legs shot out and his feet caught something; he had the satisfaction of hearing a surprised grunt from DeCreve as the latter sailed backward.

Wilson heard a whole host of Fuzzies scampering out from their caves. He knew they had been watching all the time. He could see the soft glow of their eyes now, adaptable to the dark, as they circled close to the two men. "Oog! Oog!" shrieked the creatures, meaning goody, a fight!

DeCreve was a small man, but he was tough and wiry; Wilson realized that instantly, as they grappled. He didn't know whether DeCreve still held the atom pistol. And then he did know, as the power of it beamed out so close to his side that he could feel the swirling heat. His hands fumbled for DeCreve's right arm, found it and clung fiercely. Wilson lunged forward, and they both went down heavily. The pistol jarred from DeCreve's hand and went skidding across the rock. They both scrambled for it. Wilson reached it first, being much more familiar with sounds in this darkness. He brought it crashing down upon DeCreve's head, and the outlaw went limp. Wilson almost did too. He suddenly felt very tired.

But he managed to drag DeCreve over to his own spaceship, open it and turn on the welcoming light. He found ropes and bound DeCreve securely. Then Wilson slept, waiting for the strip of sunlight to come around again . . . the last time he ever hoped to see it on this world.

WILSON woke with the sun, as he always did. He saw DeCreve struggling with his bonds. He walked over and tightened them again.

"Listen, fella," DeCreve said, "there's no reason we can't call a truce and work together. There's enough of those furs out there to make us both rich."

At the words, Wilson felt a hot flood of anger sweep over him. He raised his hand to slap the outlaw, then changed his mind. He opened the door of the spacer and dragged DeCreve out.

"I want to show you something," Wilson said. Again he called to the Fuzzies and they came scampering from their caves to greet him, always ready to listen to one of Wilson's speeches.

He turned to DeCreve and said: "See? I just wanted you to know they're all friends of mine, and I'd sooner blast a rat like *you* to dust than harm a single one of 'em.

"Come to think of it, this has been a prosperous six months for me after all! I've assimilated Spurlin's *Advanced Principles,* there ought to be a reward for *you,* DeCreve, and I've saved all my little friends' lives."

Wilson wanted to do just one more thing before he left the Fuzzies forever. He searched DeCreve's supplies, found two hundred-pound sacks of sugar and some chocolate. He placed it all out on the rock.

Climbing back into the ship, he called to them: "That ought to last you a little while. Wish I had more. Well, it's been fun knowing you and I kind of hate to leave. Farewell, Fuzzies!"

Wilson could have sworn they looked up at him with a very human regret in their eyes. And the last thing he heard before he closed the spacer door was their chorus of Oogs, very solemn Oogs, meaning so long old pal and thanks for the sugar.

THE END

SUPER-NEUTRON

To join the Ananias Club, one had to do two things: invent a fantastic lie, and make it sound like the truth. Gilbert Hayes did the second admirably — but there was some doubt about the first!

By Isaac Asimov

IT WAS at the seventeenth meeting of the Honorable Society of Ananias that we got the greatest scare of our collective lives and consequently elected Gilbert Hayes to the office of Perpetual President.

The Society is not a large one. Before the election of Hayes there were only four of us: John Sebastian, Simon Murfree, Morris Levin and myself. On the first Sunday of every month we met at luncheon, and on these monthly occasions justified our Society's title by gambling the dinner check on our ability to lie.

It was quite a complicated process, with strict Parliamentary rules. One member spun a yarn each meeting as his turn came up, and two conditions had to be adhered to. His story had to be an outrageous, complicated, fantastic lie; *and,* it had to sound like the truth. Members were allowed to—and did—attack any and every point of the story by asking questions or demanding explanations.

Woe to the narrator who did not answer all questions immediately, or who, in answering, involved himself in a contradiction. The dinner-check was his! Financial loss was slight; but the disgrace was great.

And then came that seventeenth meeting—and Gilbert Hayes. Hayes was one

of several non-members who attended occasionally to listen to the after-dinner whopper, paying his own check, and, of course, being forbidden to participate; but on this occasion he was the only one present aside from the regular members.

Dinner was over, I had been voted into the chair (it was my regular turn to preside), and the minutes had been read, when Hayes leaned forward and said quietly, "I'd like a chance today, gentlemen."

I frowned, "In the eyes of the Society you are non-existent, Mr. Hayes. It is impossible for you to take part."

"Then just let me make a statement," he rejoined. "The Solar System is coming to an end at exactly seventeen and a half minutes after two this afternoon."

There was a devil of a stir, and I looked at the electric clock over the television receiver. It was 1:14 P. M.

I said hesitantly, "If you have anything to substantiate that extraordinary statement, it should be most interesting. It is Mr. Levin's turn today, but if he is willing to waive it, and if the rest of the Society agrees—"

Levin smiled and nodded, and the others joined in.

I banged the gavel, "Mr. Hayes has the floor."

HAYES lit his cigar and gazed at it pensively. "I have little more than an hour, gentlemen, but I'll start at the beginning—which is about fifteen years ago. At that time, though I've resigned since, I was an astrophysicist at Yerkes Observatory — young, but promising. I was hot on the trail of the solution to one of the perennial puzzles of astrophysics—the source of the cosmic rays—and full of ambition."

He paused, and continued in a different tone, "You know, it is strange that with all our scientific advance in the last two centuries we have never found either that mysterious source or the equally mysterious reason for the explosion of a star. They are the two eternal puzzles and we know as little about them today as we did in the days of Einstein, Eddington, and Millikan.

"Still, as I say, I thought I had the cosmic ray by the tail, so I set out to check my ideas by observation, and for that I had to go out in space. It wasn't, however, as easy as all that. It was in 2129, you see, just after the last war, and the Observatory was about broke—as weren't we all?

"I made the best of it. I hired an old second-hand '07 model, piled my apparatus in, and set out alone. What's more, I had to sneak out of port without clearance papers, not wishing to go through the red tape the occupation army would have put me through. It was illegal, but I wanted my data—so I headed out at a right angle to the ecliptic, in the direction of the South Celestial Pole, approximately, and left Sol a billion miles behind me.

"The voyage I made, and the data I collected are unimportant. I never reported one or the other. It was the planet I found that makes the story."

At this point, Murfree raised those bushy eyebrows of his and grunted, "I would like to warn the gentleman, Mr. Chairman. No member has yet escaped with his skin with a phony planet."

Hayes smiled grimly, "I'll take my chance.—To continue; it was on the eighteenth day of my trip that I first detected the planet, as a little orange disc the size of a pea. Naturally, a planet in that region of space is something of a sensation. I headed for it; and immediately discovered that I had not even scratched the surface of that planet's queerness. To exist there at all was phenomenal—but it likewise possessed absolutely no gravitational field."

Levin's wine-glass crashed to the floor. "Mr. Chairman," he gasped, "I demand the gentleman's immediate disqualification. No mass can exist without distorting the space in its neighborhood and thus creating a gravitational field. He has made an impossible statement, and should therefore be disqualified." His face was an angry red.

But Hayes held his hand up, "I demand time, Mr. Chairman. The explanation will be forthcoming in due course. To make it now would only complicate things. Please, may I continue?"

I considered, "In view of the nature of your story, I am disposed to be lenient. Delay is granted, but please remember that an explanation will be required eventually. You will lose without it."

"All right," said Hayes. "For the present, you will have to accept my statement that the planet had no gravity *at all.* That is definite, for I had complete astronomical equipment upon my ship, and though my instruments were very sensitive, they registered a dead zero.

"It worked the other way around as well, for the planet was not affected by the gravity of other masses. Again, I stress the point that it was not affected *at all.* This I was not able to determine at the time, but subsequent observation over a period of years, showed that the planet was traveling in a straight-line orbit and at a constant speed. As it was well within the sun's influence, the fact that its orbit was neither elliptical nor hyperbolic, and that, though approaching the sun, it was not accelerating, showed definitely that it was independent of solar gravity."

"Wait a while, Hayes." Sebastian scowled till his gold premolar gleamed. "What held this wonderful planet together? Without gravity, why didn't it break up and drift apart?"

"Sheer inertia for one thing!" was the immediate retort. "There was nothing to *pull* it apart. A collision with another body of comparable size might have done it—leaving out of consideration the possibility of the existence of some other binding force peculiar to the planet."

HE SIGHED and continued, "That doesn't finish the properties of the body. It's red-orange color and its low reflective power, or albedo, set me on another track, and I made the astonishing discovery that the planet was entirely transparent to the whole electro-magnetic spectrum from radio waves to cosmic rays. It was only in the region of the red and yellow portion of the visible-light octave that it was reasonably opaque. Hence, its color."

"Why was this?" demanded Murfree.

Hayes looked at me, "That is an unreasonable question, Mr. Chairman. I maintain that I might as well be asked to explain why glass is entirely transparent to anything above or below the ultra-violet region, so that heat, light, and X-rays pass through, while it remains opaque to ultra-violet light itself. This sort of thing is a property of the substance itself and must be accepted as such without explanation."

I whacked my gavel, "Question declared improper!"

"I object," declared Murfree. "Hayes missed the point. Nothing is perfectly transparent. Glass of sufficient thickness will stop even cosmic rays. Do you mean to say that blue light would pass through an entire planet, or heat, for instance."

"Why not?" replied Hayes. "That perfect transparency does not exist in your experience does not mean it does not exist altogether. There is certainly no scientific law to that effect. This planet was perfectly transparent except for one small region of the spectrum. That's a definite fact of observation."

My gavel thumped again, "Explanation declared sufficient. Continue, Hayes."

His cigar had gone out and he paused to relight. Then, "In other respects, the planet was normal. It was not quite the size of Saturn—perhaps half way in diameter between it and Neptune. Subsequent experiments showed it to possess mass, though it was hard to find out how much—certainly more than twice Earth's. With mass, it possessed the usual properties of inertia and momentum—but no gravity."

It was 1:35 now.

Hayes followed my eyes and said, "Yes, only three-quarters of an hour is left. I'll hurry! . . . Naturally, this queer planet set me to thinking, and that, together with the fact that I had already been evolving certain theories concerning cosmic rays and novae, led to an interesting solution."

He drew a deep breath, "Imagine—if you can—our cosmos as a cloud of—well, super-atoms which—"

"I beg your pardon," exclaimed Sebastian, rising to his feet, "are you intending to base any of your explanation on drawing analogies between stars and atoms, or between solar systems and electronic orbits?"

"Why do you ask?" questioned Hayes, quietly.

"Because if you do, I demand immediate disqualification. The belief that atoms are miniature solar systems is in a class with the Ptolemaic scheme of the universe. The idea has never been accepted by responsible scientists even at the very dawn of the atomic theory."

I nodded, "The gentleman is correct. No such analogy will be permitted as part of the explanation."

"*I* object," said Hayes. "In your school course in elementary physics or chemistry, you will remember that in the study of the properties of gases, it was often pretended, for the sake of illustrating a point, that the gas molecules were tiny billiard balls. Does that mean that gas molecules *are* billiard balls?"

"No," admitted Sebastian.

"It only means," drove on Hayes, "that gas molecules act similarly to billiard balls in some ways. Therefore the actions of one are better visualized by studying the actions of the other.—Well, then, I am only trying to point out a phenomenon in our universe of stars, and for the sake of ease of visualization, I compare it to a similar, and better-known, phenomenon in the world of atoms. That does not mean that stars are magnified atoms."

I WAS won over. "The point is well-taken," I said. "You may continue with your explanation, but if it is the judgment of the chair that the analogy becomes a false one, you will be disqualified."

"Good," agreed Hayes, "but we'll pass on to another point for a moment. Do any of you remember the first atomic power plants of a hundred and seventy years ago and how they operated?"

"I believe," muttered Levin, "that they used the classical uranium fission method for power. They bombarded uranium with slow neutrons and split it up into masurium, barium, gamma rays and more neutrons, thus establishing a cyclic process."

"That's right! Well, imagine that the stellar universe acted in ways—mind you, this is a metaphor, and not to be taken literally—like a body composed of uranium atoms, and imagine this stellar universe to be bombarded from without by objects which might act in some ways similar to the way neutrons act on an atomic scale.

"Such a super-neutron, hitting a sun, would cause that sun to explode into radiation and more super-neutrons. In other words, you would have a nova." He looked around for disagreement.

"What justification have you for that idea?" demanded Levin.

"Two; one logical, and one observational. Logic first. Stars are essentially in matter-energy equilibrium, yet suddenly, with no observable change, either spectral or otherwise, they occasionally explode. An explosion indicates instability, but where? Not within the star for it had been in equilibrium for millions of years. Not from a point within the universe, for novae occur in even concentration throughout the universe. Hence, by elimination, only from a point *outside* the universe.

"Secondly, observation. I came across one of these super-neutrons!"

Said Murfree indignantly: "I suppose you mean that gravitationless planet you came across?"

"That's right."

"Then what makes you think it's a super-neutron? You can't use your theory as proof, because you're using the super-neutron itself to bolster the theory. We're not allowed to argue in circles here."

"I know that," declared Hayes, stiffly. "I'll resort to logic again. The world of atoms possesses a cohesive force in the electro-magnetic charge on electrons and protons. The world of stars possesses a cohesive force in gravity. The two forces are only alike in a very general manner. For instance, there are two kinds of electrical charges, positive and negative, but only one kind of gravity—and innumerable minor differences. Still, an analogy this far seems to me to be permissible. A neutron on an atomic scale is a mass without the atomic cohesive force — electric charge. A super-neutron on a stellar scale *ought* to be a mass without the stellar cohesive force—gravity. Therefore, if I find a body without gravity, it seems reasonable to assume it to be a super-neutron."

"Do you consider that a rigorously scientific proof?" asked Sebastian sarcastically.

"No," admitted Hayes, "but it is logical, conflicts with no scientific fact I know of, and works out to form a consistent explanation of novae. That should be enough for our purpose at present."

Murfree was gazing hard at his fingernails, "And just where is this super-neutron of yours heading?"

"I see you anticipate," said Hayes, sombrely. "It was what I asked myself at the time. At 2:09½ today it hits the sun square and eight minutes later, the radiation resulting from the explosion will sweep Earth to oblivion."

"WHY didn't you report all this?" barked Sebastian.

"Where was the use? There was nothing to be done about it. We can't handle astronomical masses. All the power available on Earth, would not have sufficed to

swerve that great body from its path. There was no escape within the Solar System itself for Neptune and Pluto will turn gaseous along with the other planets, and interstellar travel is as yet impossible. Since man cannot exist independently in space, he is doomed.

"Why tell of all this? What would result after I had convinced them that the death warrant was signed? Suicides, crime waves, orgies, messiahs, evangelists, and everything bad and futile you could think of. And after all, is death by nova so bad? It is instantaneous and clean. At 2:17 you're here. At 2:18 you are a mass of attenuated gas. It is so quick and easy a death, it is almost not death."

There was a long silence after this. I felt uneasy. There are lies and lies, but this sounded like the real thing. Hayes didn't have that little quirk of the lip or that little gleam in the eye which marks the triumph of putting over a good one. He was deadly, deadly serious. I could see the others felt the same. Levin was gulping at his wine, hand shaking.

Finally, Sebastian coughed loudly, "How long ago did you discover this super-neutron and where?"

"Fifteen years ago, a billion miles or better from the sun."

"And all that time it has been approaching the sun?"

"Yes; at a constant speed of two miles per second."

"Good, I've got you!" Sebastian almost laughed his relief. "Why haven't the astronomers spotted it in all this while?"

"My God," responded Hayes, impatiently, "it's clear you aren't an astronomer. Now what fool would look to the Southern Celestial Pole for a planet, when they're only found in the ecliptic?"

"But," pointed out Sebastian, "the region is studied just the same. It is photographed."

"Surely! For all I know, the super-neutron has been photographed a hundred times—a thousand times if you like—though the Southern Pole is the most poorly watched region of the sky. But what's to differentiate it from a star? With its low albedo, it never passed eleventh magnitude in brightness. After all, it's hard enough to detect any planets in any case. Uranus was spotted many times before Herschel realized it was a planet. Pluto took years to find even when they were *looking* for it. Remember also that without gravity, it causes no planetary perturbations, and that the absence of these removes the most obvious indication of its presence."

"But," insisted Sebastian, desperately, "as it approached the sun, its apparent size would increase and it would begin to show a perceptible disc through a telescope. Even if its reflected light were very faint, it would certainly obscure the stars behind it."

"True," admitted Hayes. "I will not say that a really thorough mapping of the Polar Region would not have uncovered it, but such mapping has been done long ago, and the present cursory searches for novae, special spectral types, and so on are by no means thorough. Then, as the super-neutron approaches the sun, it begins to appear only in the dawn and twilight—in evening and morning star fashion—so that observation becomes much more difficult. And so, as a matter of fact, it just has not been observed—and it is what should have been expected."

Again a silence, and I became aware that my heart was pounding. It was two o'clock even, and we hadn't been able to shake Hayes' story. We had to prove it a lie fast, or I'd die of sheer suspense. We were all of us watching the clock.

LEVIN took up the fight. "It's an awfully queer coincidence that the super-neutron should be heading straight for the

sun. What are the chances against it? Remember, that would be the same thing as reciting the chances against the truth of the story."

I interposed, "That is an illegitimate objection, Mr. Levin. To cite improbability, however great, is not sufficient. Only outright impossibility or citation of inconsistency can serve to disqualify."

But Hayes waved his hand, "It's all right. Let me answer. Taking an individual super-neutron and an individual star, the chances of collision, head on, are all but infinitely small. However, statistically, if you shoot enough super-neutrons into the universe, then, given enough time, every star ought to be hit sooner or later. Space must be swarming with super-neutrons—say one every thousand cubic parsecs—so that in spite of the vast distances between the stars and the relative minuteness of the targets, twenty novae occur in our single Galaxy every year—that is, there are twenty collisions between super-neutrons and stars annually.

"The situation is no different really from uranium being bombarded with ordinary neutrons. Only one neutron out of a hundred million may score a hit, but given time, every nucleus is exploded eventually. If there is an outer-universe intelligence directing this bombardment—pure hypothesis, and *not* part of my argument, please—a year to us is probably an infinitesimal fraction of a second to them. The hits, to them, may be occurring at the rate of billions to their seconds. Energy is being developed, perhaps, to the point where the material this universe composes has become heated to the gaseous state—or whatever passes for the gaseous state there. The universe *is* expanding, you know—like a gas."

"Still, for the very first super-neutron entering our system to head straight for the sun seems—" Levin ended in a weak stammer.

"Good Lord," snapped Hayes, "who told you this *was* the first? Hundreds may have passed through the system in geologic times. One or two may have passed through in the last thousand years or so. How would we know? Even when one is headed straight for the sun, astronomers don't find it. Perhaps this is the only one that's passed through since the telescope was invented, and before then, of course. . . . . And never forget that, having no gravity, they can go right through the middle of the system, without affecting the planets. Only a hit on the sun registers, and then it's too late."

He looked at the clock, "2:05! We ought to see it now against the sun." He stood up and raised the window shade. The yellow sunlight streamed in and I moved away from the dusty shaft of light. My mouth was dry as desert sand. Murfree was mopping his brow, but beads of sweat stood out all along his cheeks and neck.

Hayes took out several slips of exposed film-negative and handed them out, "I came prepared, you see." He held one up and squinted at the sun. "There it is," he remarked placidly. "My calculations showed it would be in transit with respect to Earth at the time of collision. Rather convenient!"

I was looking at the sun, too, and felt my heart skip a beat. There, quite clear against the brightness of the sun, was a little, perfectly round, black spot.

"Why doesn't it vaporize?" stammered Murfree. "It must be almost in the sun's atmosphere." I don't think he was trying to disprove Hayes' story. He had gone past that. He was honestly seeking information.

"I told you," explained Hayes, "that it is transparent to almost all solar radiation. Only the radiation it absorbs can go into heat and that's a very small percentage of all it receives. Besides, it isn't ordinary matter. It's probably much more

refractory than anything on Earth and the Solar surface is only at 6,000 degrees Centrigrade."

He pointed a thumb over his shoulder, "It's 2:09½, gentlemen. The super-neutron has struck and death is on its way. We have eight minutes."

We were dumb with something that was just simply unbearable terror. I remember Hayes' voice, quite matter-of-fact, saying, "Mercury just went!" then a few minutes later, "Venus has gone!", and lastly, "Thirty seconds left, gentlemen!"

The seconds crawled, but passed at last, and another thirty seconds, and still another. . . .

AND on Hayes' face, a look of astonishment grew and spread. He lifted the clock and stared at it, then peered through his film at the sun once more.

"It's gone!" He turned and faced us, "It's unbelievable. I had thought of it, but I dared not draw the atomic analogy too far. You know that not all atomic nuclei explode on being hit by a neutron. Some, cadmium, for instance, absorb them one after the other like sponges do water. I—"

He paused again, drew a deep breath, and continued musingly, "Even the purest block of uranium contains traces of all other elements. And in a universe of trillions of stars acting like uranium, what does a paltry million of cadmium-like stars amount to—nothing! Yet the sun is one of them! Mankind never deserved that!"

He kept on talking, but relief had finally penetrated and we listened no longer. In half-hysterical fashion, we elected Gilbert Hayes to the office of Perpetual President by enthusiastic acclamation, and voted the story the whoppingest lie ever told.

But there's one thing that bothers me. Hayes fills his post well; the Society is more successful than ever—but I think he should have been disqualified after all. His story fulfilled the second condition; it sounded like the truth. But I don't think it fulfilled the *first* condition.

I think it *was* the truth!

THE END

The Tree of Life

The Red Tree, not knowing what it did, had given humanity to the world. Now it was planning to take back its gift. . . .

By Paul Edmonds

WE FOUND the thing near the Burmese frontier, in the Annamite mountains, after tracking down vague legends for months. What it was I don't know. A great and mysterious people once lived in Indo-China, and I think their science far surpassed ours. Certainly the Red Tree could never have evolved without human aid.

The Red Tree—well, that was part of the legend. We were hunting the Garden

of Eden. Or, rather, the birthplace of the human race. Fables have it that man developed from a marsupial in the Tigris-Euphrates Valley; science has dug up significant fossils in the Gobi. But we were on the track of something different. We had seen quaternary human skulls, far older than the Cro-Magnon, sent to us from the Annamites; and Babcock, our ethnologist, had a set of ancient manuscripts which he said were copied from sources older than Genesis.

He looked like some artist's conception of a Martian—shivelled little body, with a bulbous bald head set atop it. At night, squatting by our fire, he would talk for hours on what we might possibly find. His wrinkled, parchment face would light up with intense conviction.

"Folk-lore has a scientific basis. These native legends—they tie in beautifully with Genesis. All races believe in a super race that met disaster. Well, why not?"

"Atlantean myths," Kearney grumbled. He was the boss, a biologist, a red-haired giant with pale, piercing eyes. He was a slave-driver, but paid well. So we weren't kicking.

"Atlantean myths," he repeated. "Such a mutation is ridiculous. You imply that a super race sprang suddenly from Cro-Magnons, and then vanished without trace. Pure bunk!"

Babcock glared at him. "I said nothing of the sort!" His squeaky voice was annoyed. "There are aboriginal races today. Suppose all civilized mankind suddenly met a disaster—something only the hardiest physical species could survive? In a few hundred years, perhaps, the Earth would contain nothing but savages—Australian bush-men!"

Kearney smiled infuriatingly. "All right. Suppose something like that happened long ago. Wouldn't we have found architectural traces—artifacts?"

"Not if such a community was isolated. It'd have to be, in a world filled with savages. Suppose the most intelligent ones interbred? That'd mean a circumscribed locale. It happened in Egypt, to some extent."

"No traces," Gunther rumbled. He was our archeologist, a squat, swarthy, bearded man who looked like a Neanderthaler himself. He peered through horn-rimmed glasses and growled, "They'd have left some traces."

"Not if they lived in a world hostile to them. They would have found some safe retreat. Besides—what about Easter Island?"

"Oh, shut up," Gunther said. "You're crazy."

Babcock flared up at last. "If you'd taken the trouble to read those parchments, you'd be a lot smarter now."

I NOTICED the native bearers were watching us, so I hurriedly tried to pour a bit of oil. This was natural, for I wasn't a scientist, except in a very minor way. My job was to take notes, and use our cameras whenever it seemed advisable. Later, we'd write up my notes, and bring them out in book form, back in the States. If we got enough film footage, Hollywood might be interested. So I had to keep my eyes open.

However, shooting a fight among the members of the party wasn't in the cards. "Where's Westerly?" I asked. "Haven't seen him for hours. Do you think—"

Kearney moved his broad shoulders impatiently. "The devil with him. He's hitting the pipe, I suppose. But he knows enough to taper off after a while. We've got a long march tomorrow."

Inwardly, I wasn't so sure. We had picked up Westerly in Saigon. He had been recommended as one of the best guides in the business. Maybe so—but my own field, in a small way, was psychology. I classified Westerly as a schizoid, extremely neurotic, and, I thought, mentally unstable. Also, he smoked opium

steadily. A half-breed, he was the sort of man who couldn't be trusted with a gun—for he'd fire at a shadow.

Babcock ignored me completely. "Ever heard of mutations, Gunther?"

The squat man tugged at his beard. "So what?"

"This lost race could have been a mutation—the interbred result of one. Just use logic, for God's sake! Such a tribe would advance beyond its neighboring ones. Better agricultural methods. They'd have treasures, food, clothing. Other tribes would raid it. The mutations would have to find a safe place—"

"Here in Indo-China," Gunther grinned.

"These ranges have never been explored. The natives stay away from certain parts. I've questioned some of them. They say the wild animals are tame there, and that—something—lives beyond. They don't know what. When they find themselves in that part of the country, they get out, *mao!* Damn quick!"

"I expect to find a few fossils, at best," Babcock remarked. "Maybe a carving or two."

JUST then Westerly joined us. He was a thin, gaunt man, skeletal and hollow-eyed, with sagging hollows in his cheeks. He stood by the fires, watching us silently, his eyes very bright.

"What's up?" Kearney asked.

"The boys. They won't stick. I've a hunch they'll desert pretty soon."

"Yeah? What about paying 'em more squeeze?"

Westerly shook his head. "That isn't it. They're scared stiff. Tonight—tomorrow—they'll slip off."

Gunther said savagely, "We'll take turns standing guard."

Kearney bit his lip. "I dunno. If it comes to a showdown—they might cut our throats rather than go further into the mountains. How about it, Westerly?"

The guide nodded. "They would, all right."

"So. Suppose we have 'em camp here and wait for us? How does that sound?"

"It's about the only thing to do," Westerly said. "It's wisest, and safest. We can't be more than four days' march from—wherever we're going. Unless the maps are all wrong."

Well—they were. It took weeks of arduous slogging through the wilderness, foraging as much as possible off the country, and hoping the natives would be waiting for us at the base when we got back. If we got back. Such tribes as we encountered were hostile, but we had our rifles. So it never actually came to a scrap.

Our supplies were low. Kearney's marksmanship saved us; not a day passed without some sort of fresh meat. For a while, that is. Presently there was little game to be seen as we penetrated farther and farther into those towering, mysterious ranges. They are blank spaces on the map. I've been up the Orinoco, and in parts of Africa where white men had never been before; but those mountains on the Burma frontier were the loneliest place in the world.

The point is—we found Eden. And, I think, mostly by accident; a rift chopped out of the heart of the slopes, a gorge-valley a mile wide and perhaps five miles long, winding tortuously between high cliffs. Imagine the Grand Canyon a mile wide. That would be it. There was vegetation down there, green and inviting, and a silvery river that emerged from a cavern in the rock wall to vanish down the valley somewhere.

Babcock stared down, his face white as paper. "Those channels—" he said.

I looked at him. "Eh?"

"See? Dry channels now, but once there were four rivers flowing through that gorge."

Gunther muttered something in his

beard. I said, "Well, what about it?"

"Eden!" Babcock grimaced with excitement. "The four rivers of Eden! Not the Euphrates Valley, after all. This is the real basis of Genesis—the valley of the four rivers!"

Gunther coughed. "You're jumping at conclusions. There's no proof." But I saw doubt in his eyes.

"There will be ruins down there," Babcock said confidently. "Wait."

Kearney was squinting at the depths of the gorge. "First we must get down."

It wasn't too difficult. In the beginning, those cliff faces must have been unscalable and perpendicular. Perhaps the natives climbed up and down by means of pegs hammered into the walls. In any case, erosion and earth-slips had done their work, and shifting strata had made ledges and cracks leading down. It was hard, but not too hard. The five of us descended with difficulty, passing along our packs. I paused to take a few camera shots of the scene.

At the bottom—well, it was like a park. The place was very silent. Mist drifted up from the river. A mile away the opposite wall rose to the blue Burma sky.

KEARNEY hefted his rifle. "Something alive there," he said softly.

We froze, watching a clump of bushes a hundred feet away. Out of it slunk a tiger—an unexpected beast at this altitude.

Kearney's rifle came up. The tiger stared at us, and then looked away. It seemed to be waiting for something.

There was a scrambling in the rocks above us. I whirled, just in time to see a mountain goat leap entirely over our heads. It came down on the river bank, plunged into the water, and began to swim across.

Puzzled, we watched.

The goat emerged, dripping, and began to move toward the tiger. Yet, obviously, it had seen the carnivore.

The tiger didn't move. It just waited, while the goat walked into its jaws. It was the damnedest thing I had ever seen. The striped giant reached out a paw, rolled the goat close, and bit into its neck. There was no—struggle.

The tiger stood up and dragged the goat back into the bushes. That was all.

A small thing. But its significance made my spine crawl. I heard Westerly whisper, "The land where beasts are tame. . . ."

Kearney ruffled his red hair. His pale eyes were ablaze. "Funny," he said.

Gunther nodded. "Very funny."

"It's impossible. It's a biological impossibility. It violates the basic law of life —preservation of the *id,* the self. That tiger was *waiting.* It knew the goat would come. And the goat did. Ruminants don't commit suicide!"

Westerly was very frightened. I had a hunch his opium supply had run out several days ago. He was nervous, jumpy, fidgety. He said, "Are we going to camp here?"

Kearney moved his heavy shoulders impatiently. "I suppose so. This . . . it's extraordinary. But we have our guns. Come along."

We found a shallow ford not far away, and crossed the river there. We struck out downstream, keeping to the open country. I had a feeling that we were being watched. When I turned suddenly, there was movement.

Then I had it. The birds. They were—following us.

I mentioned that to Kearney. He only growled, but Gunther nodded.

"Yeah. They may just be curious. Probably that's it."

Yet it was odd. The silence brooding over the valley, and those mountainous, towering ramps shutting us in. I sensed trouble.

A tiger came out of the underbrush and walked toward us. Kearney whipped up his rifle. The carnivore turned its head, staring with amber eyes, and then unhurriedly departed, leaving us vastly puzzled.

Kearney said, "Check and balance."

I looked at him. "Eh?"

"Nature's check and balance system. We're familiar with it in the outside world. But here, under abnormal conditions, it may have developed differently. The natural food of tigers might conceivably be conditioned to act as—food."

Gunther barked a harsh laugh. "Goats conditioned to walk down tigers' throats? Rot!"

Kearney looked at him steadily. "Got another explanation?"

He was silent. We walked on, rifles ready.

WE FOUND the ruins midway down the gorge. Little ridges of weathered stone, pitted and eroded. Gunther got down on his knees to stare. His beard seemed to bristle with antonishment.

"Granite," he said. "Good Lord! This is *old!*"

Little Babcock was crouching beside him. "Any inscriptions?"

"Maybe once. Not now."

Kearney said, "More of 'em. Over here."

We were at the edge of a little forest. Dim sunlight slanted through the trees. One, I saw with astonishment, curiously resembled a cycad—a tree-fern. Perhaps I was wrong. A cycad—evolved, changed.

The ruins were in better condition as we went on. We found an inscription at last. Gunther and Babcock were in ecstacies.

"Hieroglyphics."

"Yeah. Sign-pictures."

"Egyptian?" I asked.

Gunther glared at me. "Not even Sumerian. I tell you, this is *old!* Maybe you were right after all, Babcock."

"Of course I was right! The birthplace of the human race. . . ."

We stood on the edge of a little stone pit, staring down at Babcock and Gunther prowling around within it. This ruin seemed in much better condition than the others. I had the curious idea that there was a reason for this. Perhaps the archaic builders of the city had wanted some sort of monument.

Kearney called down, "Any clues? What about translation?"

Babcock shook his head. "Maybe. Can't tell yet. It's incredibly old, but that may be an advantage. Inscriptions by decadent races are much harder to decipher." He spoke briefly with Gunther. "Go on ahead, if you want. We're going to copy this."

After a brief hesitation, we obeyed, tossing two rifles down into the pit. We moved further into the grove. Kearney's face was alight with interest. Westerly was still jittery. He kept looking up at the birds following us. I didn't feel any too easy myself. Nevertheless, I had my job to do. I used the camera as occasion arose.

"You think this is the garden of Eden?" Westerly asked me, in a low voice.

I shrugged. "It's old, anyway. These ruins—I don't know." I had a sudden mental picture of a race of intelligent, cultured men dwelling in a world filled with brutish Neanderthalers or Cro-Magnons. A few mutants, developed before their time—

What had Earth been like then? Not as it is today, certainly!

We came out into a little clearing. The ruins of a building were there. A circular cleared space, where a pavement might once have been, was surrounded by irregular hummocks and ridges—fallen walls and pillars.

In the circle's center grew the **Red Tree.**

IT WAS sentient—alive. I sensed that from the beginning. I knew suddenly, that this was the focal point of the valley.

It looked like a pineapple, five feet high, rugose and red as blood, with a lighter scarlet crown like a big globe atop it. That was all. A tree that made Kearney, the biologist, gasp in wonder.

"No!" he said, and—"Impossible! This thing. . . ."

Westerly was shivering. "That is the Tree. This is Eden—yes!"

Kearney gave him a vicious glance. "Don't be a fool. It's a mutation—an unknown species."

My camera was unreeling busily, with droning clicks. I had color film, luckily. The tree would photograph well.

Kearney walked toward it, staring. "I'm not sure it's vegetable at all," he said thoughtfully. "There is—"

The globe atop the pineapple stirred. It lashed into motion. It uncoiled, and the tentacles of some octopoid thing reached out toward Kearney!

By sheer luck it got the rifle first. Kearney yelled and threw himself back. He went down, falling heavily full-length, and tried to roll away. One of those damned tentacles had his foot. I saw him slipping back, clawing at the ground.

I let the camera drop, to dangle from its strap, and leaped toward him. I got him under the shoulders and yanked. No use. The tree was incredibly strong.

Other tentacles reached toward us.

"Westerly!" I shouted. But the guide was cowering back, licking his lips, horribly afraid.

Kearney's face was white as washed stone. He said, harshly; "Keep pulling. Vail!"

I obeyed, but we were losing ground, and being dragged steadily toward that forest of waving tentacles.

I heard thumping footsteps. Gunther burst into view, summoned by the commotion, his black beard bristling. He saw what was happening, and jerked his rifle up. The bullet sang harmlessly off the Tree's armored trunk.

He dived past us, yanking a light axe from his belt. He started to chop on the tentacle that held Kearney. Meanwhile, I was still pulling desperately, my heels digging into the ground. Kearney had a knife in his hand, and was slashing at his shoe-laces.

The shoe came off suddenly, and the tentacle whipped back. It coiled around Gunther. It lifted him!

Lifted him high! Abruptly he was wrapped in a cocoon of the scarlet ropes. He was raised up, head down, and then—lowered—

The Tree was hollow. Gunther vanished into it. The tentacles coiled into a bunch at the top, as before. There was no trace of our archeologist.

Kearney was cursing in a steady monotone. He seized a rifle and pumped bullets at the thing. I picked up the hatchet and went gingerly toward the crimson trunk. My first blow was as useless as the last. It was like hitting resilient steel.

Kearney yelled and pulled me back. The tentacles were uncoiling again.

Gunther, still struggling, was flung down at our feet. The red ropes flashed up. They settled in their former position, and remained motionless.

WE SEIZED Gunther, dragging him to a safe distance. He shook himself free, found a bottle in his pocket, and thirstily gulped whiskey.

"You all right?" Kearney asked.

"Yeah . . . I'm okay. Whew!"

Kearney stared at him. "That's the damnedest thing I've ever seen. A cannibalistic tree that's finicky about its food."

I said, "Just what happened, Gunther?"

He grinned crookedly. "I don't know. Everything went dark; I kept on fighting; and then I was tossed out."

Kearney said, "There wasn't any digestive fluid." His brows were drawn together. He was vastly puzzled.

Gunther shook his head. "Apparently not. Let's get out of here."

We collected Westerly, who was nearly hysterical, and made our way back to the pit where we had left Babcock. We met him halfway, and reassured him.

"I think we've done enough exploring for a while," Kearney said. "Let's pitch camp."

Babcock nodded. "Near those inscriptions. I think I can decipher them—they're surprisingly easy. There's an odd similarity to the sacred writings of India."

It was Eden, in a way. We saw no more tigers, though we kept our guns ready. Familiarity bred contempt, and presently we were strolling about the forest as though we had lived there all our lives.

Not Babcock, though. He was busily working on the hieroglyphics. All that afternoon, and through the sudden dusk. Kearney and Gunther went off after a time to look at the Red Tree—from a safe distance. After a time I followed and photographed it again.

Moonlight presently silvered the valley. We sat around our fire, talking, while Babcock kept working on his translation. Gunther didn't offer to help him.

The little ethnologist looked worried. I glanced at him from time to time, and once he met my gaze, a curious speculation in his eyes. Then he went back to work. We were all waiting anxiously for him to finish.

At last he sighed and put his notebook down. "Everybody here?" he asked.

"Yeah," Kearney nodded. "What's the answer?"

But Babcock didn't seem anxious to begin. "Look," he said at last, "this is all pretty incredible. And . . . I'm scared as hell."

We stared at him. Gunther said, "What the devil—"

Babcock said oddly. "*You* know, don't you? The Red Tree—caught you—" He glanced around. "I'm wondering whether anyone else was caught."

There was a puzzled silence. At length Babcock sighed.

"YOU wouldn't mention it, of course . . . Well, some of us may be all right. Most of us ought to be, I hope. I know I am."

What on earth are you talking about?" Kearney snapped.

"The Tree," Babcock said simply. "It's alive. It's intelligent. All the life in this valley—birds and beasts—belong to it. Are part of it."

Gunther growled inarticulately. Babcock's eyes dwelt on him.

"These inscriptions are a warning. The record of an experience by the pre-Adamite race. Once, very long ago, there was a culture in this valley. They had their science—a form of it."

"Science in Cro-Magnon days!" I said incredulously.

"These were mutants. And the Earth wasn't quite the same in those days. Life was still very close to the beginning. There were plenty of mutations. That's why they made the Tree—were able to make it."

I stared.

Babcock bit his lip. "Or else it was a natural mutation. The inscriptions aren't quite clear. The Red Tree destroyed all life—or, rather, all intelligence in this valley. Except the few who were able to escape. The Adam and Eve myth—the Tree of Knowledge. Remember?"

"You're talking about folk-lore, of course," Kearney said.

Babcock's tongue circled his mouth. "No, I'm not. You yourself said the animals here didn't act normally. They were conditioned—but by what?" He

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answered his own question. "By the Tree."

Gunther said, "You're crazy."

Suddenly there was a pistol in Babcock's hand. He held it pointed at Gunther. Kearney said, "Put that down!"

"Not yet. Let me talk. I tell you I'm afraid!" Naked horror showed in his eyes for a brief second. He caught himself, went on quietly:

"What's symbiosis, Kearney?"

"Give and take. A parasite living off a host. Mutual help. Like the pilot fish and the shark."

"Is mental symbiosis possible?"

Kearney's eyes hooded. "Mental? You're getting into metaphysics."

"The hell I am," Babcock said sharply. "That Tree is alive! Its intelligent! It has—a brain."

"It's a vegetable."

"You're a mammal. But your primal ancestors weren't intelligent, either. You evolved. The Tree is a mutant. Ages on ages ago, Nature experimented with intelligence. Eventually mammals got it. But plants had their chances. Perhaps only once, here, in this valley. A mutant may bring about a superman—that's an accepted theory. Well, once there was a mutation that caused a super-tree."

Kearney snorted. Babcock's eyes were desperate.

"I'm translating—and it fits into known scientific facts. I tell you, that Tree is intelligent. A descendant of the original one, perhaps. Living in this valley for uncountable ages—and living by symbiosis."

"It's beyond me," I said.

"Mental symbiosis. It takes—something—from its victims, and gets control of their minds. It assimilates all their knowledge. In return, it gives—what does it give, Gunther?"

We looked at the archeologist. His bearded face was a mask. His eyes were—strange.

He said, "You're crazy. Come over to the Tree again, and I'll prove it's merely a plant."

"So we can be trapped?" Babcock asked. "As you were? It isn't you, Gunther. It's the intelligence of the Tree, talking through your brain."

Gunther laughed. His words caught us completely by surprise.

"You're right," he said. "Soon I shall have you all. Then you will take me to the outer world, which I did not know existed. Living here for ages, seeing only with the brute minds of beasts. . . ."

I HEARD Kearney whisper, "Good God!" Babcock's gun swung up. I jumped for it, grappled with him. There was a crackle of underbrush, and Gunther was gone, plunging into the forest.

Westerly laughed. There was lunacy in his tone. He kept on laughing.

Babcock let me have the gun. "He's gone," he said, shrugging. "No use chasing him tonight."

I stepped back. Kearney was looking completely baffled. Westerly's insane laughter rang out through the still night of the valley.

I got water and brandy, and forced them down the guide's throat. He quieted, looking at me blankly. Then he subsided into silence, his lips moving. As I said, psychology is my field.

It didn't take long for me to see that Westerly was insane. Without the soporific of opium, his neurotic mind terrified by this business, he had taken refuge in the dream-world of the schizophrenic. He was mad. Harmless. But—God!

Half an hour later he was tucked into his blanket, mumbling softly, and we sat around the fire and looked at each other. Babcock said, "We've got to get out of here."

Kearney groaned. "This is—impossible."

"You're a biologist. Is it?"

"No . . . no. It fits in. The Tree has an impregnable defensive armor. That's to protect some incredibly delicate nervous organism inside—like our skulls, protecting our brains. Bullets won't harm the thing. I suppose it could have a—a brain."

"It wasn't Gunther talking, at the end," Babcock said. "It was the Tree. Remember? It said it would have us all soon—and we'd take it to the outer world. It's a vampiric intelligence. It sucks our minds—"

"It can be killed." Kearney stood up. "I've some acid that should affect it."

"Nothing can harm it. It—it's perfect, in its fashion. Nothing can get through the armor. Its defences kept pace with its intelligence. The mind inside the Tree is an incredibly delicate organism."

"We must try. You've convinced me, Babcock." Kearney took some canisters from his knapsack. "Come along. Bring rifles. Vail, you stay here and take care of Westerly, in case Gunther comes back."

I said, "Okay," and squeezed my automatic. Babcock, his face contorted, found two rifles and followed Kearney into the moonlit depths of the forest.

Presently Westerly went crazy. I had to revise my former opinion. He was more manic-depressive than schizoid. He became a raving maniac, screaming and clawing at me till, in self-defense, I was forced to knock him out.

Inwardly I felt sick. That Tree . . . intelligent, vampiric. Symbiosis . . . plant-life evolved to the nth degree! It fed on—minds.

We had not known Gunther was—possessed—until Babcock had translated the inscription left by that long dead race. I shivered. Gunther might have lured us, one by one, to the Tree, till we were all victims. Then we would have obeyed every command of that alien intelligence, taking it with us to the outer world, loosing upon Earth a terror against which there was no defence. For the thing was impregnable.

Was it?

SUDDENLY I felt cold. Babcock had said that any of us might be victims. I wasn't, I knew. Unless—unless I had *forgotten*—

Why—Kearney himself might be. . . . He had gone off with Gunther to look at the Tree. Perhaps he had fallen a victim to it then. Perhaps it wasn't—Kearney—who had been talking to us a few moments before.

In that case, Kearney, even now, would be luring the unsuspecting Babcock into the trap!

I jumped up, shaking with a fear beyond fear. I had started into the forest when, struck by a sudden thought, I came back and lifted Westerly's limp body to my back. Carrying him, I struck out for the clearing where the Tree was. I ran, stumbling, gasping. . . .

Babcock was standing, his rifle ready, not too close to the Tree. Kearney was behind him, hands lifted, about to push the little ethnologist toward those scarlet tentacles that were reaching out hungrily. I had been right. Kearney was—was no longer human. He was possessed.

I shouted, Babcock whirled, and dropped to his knees. Kearney lunged over him, rolling into that nest of tentacles. They squirmed away from him like snakes. That confirmed my guess. The Tree had taken from Kearney what it wanted already. It was seeking fresh prey.

Astonishment was in Babcock's face. He sprang up, backed away, as I ran forward, bending under Westerly's weight. The guide came to life, tried to struggle free. We went down together. I kept trying to push Westerly toward those squirming tentacles.

Babcock yelled, "Vail! You—it caught you too!"

I knew what he was thinking. That I was acting under the Tree's command. I couldn't help that; I was busy fighting Westerly.

We grappled, went down together, and rolled into the red snakes.

They closed around us. The forest spun dizzily as I was lifted. Gentle pressure was on me everywhere. Then darkness as I was lowered into the hollow trunk of the Red Tree.

Westerly and I. Neither of us struggled now. Something was leaving our brains, and something pouring into it. An ecstasy beyond life. Something unknown to flesh. Known only to that blasphemous Tree that had grown here when the valley was Eden. . . .

A dark current swept into my mind. Then it was troubled. I was floating, bodiless. . . . caught in a sudden whirlpool.

Abruptly I felt agony, wrenching, terrible. There was a soundless explosion of light. I felt myself flung into the air, and came down with a jolting thud on the ground.

I lost consciousness.

Not for long. When I awoke, Babcock was forcing brandy down my throat. I choked, spluttered, and after a while sat up.

THE clearing had—changed. The Red Tree was still there. But it was no longer alive.

The sentient malignancy had gone from it.

The tentacles dropped, lifeless and dull. The red was fading to ochre.

I looked around. Babcock, Kearney, Westerly . . . Gunther. He was kneeling beside me, watching me anxiously.

Babcock said, "What happened? It—it worked, whatever it was. Gunther's all right now. So is Kearney. But—"

Kearney was shivering. "The Tree's dead. You killed it, somehow. When you were flung out, I felt a. . . . a weight lifting from my mind. A pressure I hadn't known was there." There was still an edge of worry in his voice. As if I still might be—controlled.

Again Babcock said, "The Tree's dead; it's starting to rot already. How the devil did you do it, Vail?"

I gulped more brandy and glanced at Westerly, who was still unconscious. "Just a hunch. Poor devil . . . he's insane. Might be better if—"

"What killed the Tree?" Gunther demanded. "It was impregnable. Completely so."

"Not quite," I said. "You gave me the clue, Kearney. You said it was a delicate nervous organism, highly evolved. And it fed on intelligence—sucked the contents out of brains. I gambled on that. I gave the thing the damnedest psychic shock it had ever had. It was used to animal mentality. It absorbed yours and Gunther's without trouble, but—Westerly was insane."

There was silence. I went on. "Plants never go mad. Naturally. The Tree had developed its brain to incredible delicacy. Any violent pyschic jolt would wreck it. That's simple psychology. I gambled that if it sucked the contents of Westerly's insane mind, its nervous organism would be disrupted completely. Like throwing a monkey-wrench in machinery made of glass. Or pouring emery dust into moving gears."

"It was a risk," Babcock said.

"Yeah. But there just wasn't any other way. And it worked." Nobody had an answer to that.

I drank more brandy and shuddered. "It's dead now, anyway. But we can preserve it, now that the thing's harmless. Imagine the Tree of Knowledge behind a glass case in a New York museum! Direct from—Eden!"

THE END

INVENT OR DIE!

Lawrence's inventiveness was not what the Venusians thought it was —but it served him well in the end!

By R. R. Winterbotham

ALL day long Hal Lawrence, the earthman, had been nervous about Heeto, and the long, flat-bladed knife the Venusian fondled so sadly as he sat in the cave. Nominally Heeto was Hal's nurse and every three or four hours he dressed the wounds the terrestrial had received when his space ship cracked up in the valley.

Some days previously Hal had taught Heeto how to play chess and now Heeto was teaching Hal. There was no accounting for the brilliance of these Venusian minds, yet in all of the works Hal had seen in the valley of the caves, there was nothing that might be called a product of civilization. The Venusians lived in a stone age culture, yet they had intelligence far beyond that which the most advanced minds of earth could offer.

"Check—and mate," Heeto said. His small, red eyes gleamed from the center of his bulbous head.

"Doggone it, you've beaten me again," Hal said, grinning. "Isn't there anything you can't do? You learn English in about ten terrestrial hours, you master chess in a day or two, you work differential calculus in your head—"

Heeto didn't appear to be listening. He picked up the sword from a ledge and felt its keen edge. He rose, towering ten

feet above the earthman. Most of the height was due to his stilt-like legs, for his body was small and round, only slightly larger than his head.

"It is treason to tell you, earthman," Heeto said, "but in a few more *nid* I shall take you before the dojo, who will order me to cut off your head."

An electric shock seemed to freeze Hal Lawrence.

"Surely you're joking, Heeto!" he exclaimed. "What have I done? Why should I be decapitated?"

"It is the law," Heeto replied solemnly. "It is too bad, for I shall miss our chess games."

"If that's the law, it's not justice! Why should innocent strangers be executed? I'm a harmless man of science. I'll respect your institutions and customs, I will not rob you. I simply came here to further the interests of science for my people."

"Let's not discuss it," Heeto said. "The subject is painful to me."

"Not half as painful as it is to me," Hal assured him. "If you intended to execute me, why did you bother to patch me up after the ship crashed?"

"We did not consider you an inventor then," Heeto explained. "We thought you were part of a meteor. Now we find that it was a ship, not a meteor and that it contained many inventions. It is our custom to award inventors reprieves from execution as long as they continue to invent things. For the things you brought us in your space ship, you were rewarded generously—two hundred *nid,* all told. When you taught me chess, you were given an extra ten *nid.* All of the time is gone now. There are only three *nid* remaining on your reprieve."

A *nid is* the Venusian equivalent of a day. It is about forty hours long. The Venusian nights are fairly comfortable, but the days are unbearably hot and for this reason, Venusians spent all of their daylight hours deep in mountain caves.

"You mean invention is a capital offense but that inventions are capable of staying the execution?"

"It is the law," Heeto said. "Everyone must work to live. If men spent all of their time in invention, no one would work. When invention is punished, everyone works."

The earthman could hardly keep his eyes off the sharp blade Heeto held in his hands. "If I should invent something else, would I get another . . . er . . . reprieve?"

"If you do not invent something, you will die."

"What if I'd rather work. A little honest work never hurt anyone. Besides, I'm not much of an inventor. I had a lot of help on the space ship. I'll take a job."

"No," Heeto said, shaking his head sadly. "You are an inventor."

"Now listen, Heeto, be sensible. As a matter of fact I didn't invent chess or the cigar lighter, or any of these things on my ship. I didn't even invent the ship. I just risked my neck in someone else's idea."

"Circumstantial evidence is against you, my friend. Who on Venus has ever made such things before?"

"I tell you that I came from another planet! I'm an earthman!"

"You came from above the clouds. That must be Venus too—an unexplored land. If you can prove someone else invented these things—"

Hal groaned. The earth was millions of miles away. To prove to the Venusians, who knew nothing of astronomy because their world was cloaked in clouds, that another world existed in the universe was next to impossible.

Heeto glanced nervously about the cavern, as if in fear of being overheard.

"The dojo doesn't like you very much, earthman."

"So that's it!" Hal had never seen the dojo, but he had heard a great deal about

him. The dojo was the high lord and master, king and czar of Venus. "He's afraid of me."

"Inventions are dangerous. They throw men out of work and when men have no work they talk revolution. That is why invention is not encouraged here on Venus."

Hal smiled. "By threatening to kill me if I don't invent is no way to discourage me. Have you ever played checkers, Heeto?"

"Checkers? Is it like chess?"

"It's played on the same kind of a board."

"If it is a good game you will have ten more *nids* of life."

"Good. I can invent something in thirteen *nids.*"

THE clouds of Venus took on the characteristic, blood-red hue of the Venusian sunrise. Hal Lawrence wondered if he would ever see a real honest-to-God sunrise again.

Back home sunrise meant a new day; people of the earth faced new days eagerly. But here on Venus sunrise meant the dawn of terrible heat. Sweat already was beginning to trickle down Hal's shoulders and the humidity was suffocating.

Besides today was the last day of reprieve since his last invention. Today he would appear in court before the dojo, show a new product of his creative ability or get his head chopped off. Hal had a neat little invention for today and he hoped to win a twenty-*nid* reprieve in which to work on something else.

That was why Hal had visited the works of the Venusians. He wanted to see the industries of Venus and invent some labor saving devices. If he could throw enough men out of work, he could cause a revolution and this silly law that required an inventor to invent or die could be changed.

He saw that the chief, and perhaps the only industry of Venus was digging. Venusians were digging up a mountain range to the south of the valley and transporting the dirt and rocks to the plain east of the line of cliffs in which the Venusians dug their caves.

"It is to protect us from the heat," Heeto explained. "A range of high mountains in the east will shield our caves from the morning sun. Our nights will be longer."

Hal laughed. "After the dojo sees my new invention he won't need a mountain range."

It had been partly luck and partly the logical result of Venusian heat that Hal's new invention should be an air conditioner for the dojo's cave.

"It is not something that will displace labor?" Heeto asked horrified.

"What if it is?"

Heeto cast his round, weepy eyes to the ground and shook his head.

"Alas, there is much you do not know about the customs of my people. I like you my friend. I should hate to see your head chopped off."

The light, growing brighter each moment, was a dazzling brilliance when they reached the large royal cavern in the center of the line of cliffs along the edge of the plain.

Toward this entrance trudged Heeto and Hal and as they approached a clanging noise sounded from within. A guard, carrying a stone tipped spear, appeared in the opening.

HEETO flashed his medallion, which he wore on a string around his neck, and the guard saluted and allowed the two to enter. They passed another guard, beating lustily on an iron gong, giving the daily warning that the outside heat would no longer permit Venusians to leave their caves.

Hal Lawrence, in contrast with his Venusian companion, was short and sturdily

built. He was stripped of all excess clothing, except a pair of shorts and riding boots. Dangling from his waist was a stone-headed club, as protection from wild *ppits* and other dangerous beasts of the Venusian hills.

The passage, lighted by torches, widened into a huge chamber with painted walls. From the ceiling hung a large phosphorescent stone which made the room as light as day.

A guard, holding a long spear, stood beside a flat-topped stone at the far end of the chamber. Behind the guard, utterly incongruous with the stone-age surroundings was a large metal cabinet—Hal's air conditioning machine.

"There it is," Hal said to Heeto. "I built it with my own little hands. Dojo Ermos ought to give me twenty or thirty *nid*—"

"Or chop off your head," Heeto said ominously.

The guard suddenly snapped to attention. He swung his spear high over his head and shouted:

"Elixivar! Dojo! Ug!"

Hal often had heard the cry on the appearance of the dojo. The cry was simply a hail to the dojo, like "Long Live the King!" "Ave, Caesar!" or other terrestrial greetings to majesties.

There was the shuffle of sandals, the unison tramp of soldiers' feet and the dojo, followed by the cavern guard, entered the room from a side passage. In appearance, the dojo looked like any other Venusian—long legs, melon-like body, bulbous head and weepy eyes—but Ermos was older than most of his people. The few straggly hairs on his head were white. He moved slowly. Yet his eyes were bright and keen. They seemed to pierce Hal and to read his thoughts. They bored into Hal's soul with hatred.

Dojo Ermos seated himself on the flat-topped throne. He nodded to the body-guard, who snapped spears to the floor and stood rigidly at attention.

The scene possessed an essence of unreality to Hal. The mixture of savagery and civilization, the queerly shaped beings, the unbearable heat combined to give the atmosphere. The half-naked monarch, wearing a medal around his neck to denote his authority, might have been a south sea island monarch, save that his people solved complex mathematical problems in their heads and could master the English language in a few hours.

"Is your invention ready, Hal Lawrence?" the dojo asked.

"It is, sir," came the reply.

"Then let me warn you: if it succeeds, your execution will be delayed a suitable time, depending on the merits of the invention. If it fails, you will die immediately."

"And who is to judge?"

"I am, Hal Lawrence, and I shall judge rightly, for the law states that if the invention does what the inventor claims and I judge it wrongly, I must die." The dojo clapped his hands.

Hal stepped to the side of the conditioner and started the motor, one of the simple combustion type machines Hal had salvaged from his wrecked space ship.

The motor hummed. Fans whirred. From the vent of the conditioner came a cool breeze to fan the dojo. The hot, suffocating air of the Venusian cave grew cool and pleasant. Dojo Ermos closed his eyes and sighed with evident pleasure.

"It works on an evaporation principle, sir," Hal explained. "Water absorbs heat to turn into vapor—"

"Yes, yes. We know the principle," the dojo said.

"You know the principle and yet no one has invented this machine?" Hal asked incredibly. "Why do you prefer to suffocate in this unbearable heat, rather than make yourself comfortable?"

"Because if it were cool there would be no reason to move the mountain range in the south part of the valley. If the mountains were not moved, there would be no work for my people. I would have to execute idlers."

"You might find other work for them to do," Hal suggested. "Those who lose their jobs digging up mountains might be set to work building and repairing these machines."

"This is a machine," the dojo said, savagely, "it does a man's work. When my people learn too much about machines, they will invent other machines to do their work. The whole world will soon be peopled by idlers."

Hal opened his mouth to remonstrate, but Heeto nudged him in the ribs.

"As a matter of fact, Hal Larwence, I hardly approve of this invention," the dojo went on, throwing his head back and drinking in the cool breeze. "It deserves only one *nid* of time extension. May you invent something more worthy before your time is up."

The dojo waved his hand, indicating that the interview was over. He rose and strode back into the side passage, followed by his marching bodyguard.

HAL and Heeto followed a passage through the cliffs to their own quarters.

"One *nid!*" Hal repeated. "What can I invent in that length of time? In my world, Heeto, inventions have taken years to perfect!"

"If I were you, my friend, I would invent something that the dojo will appreciate."

Hal laughed. "And what would he appreciate? Something that would end my life quickly, no doubt. Perhaps a new way to cut off my head—"

Hal stopped suddenly. His eyes were fastened on the broad bladed sword that Heeto carried at his side.

"Who invented *that,* Heeto?"

"The sword, Hal? I do not know. It was invented many years ago—"

"Lord! Why didn't I think of it! A guillotine!"

"A what?"

Hal described the invention made famous in the French revolution. It would be easy to invent. Steel from the wrecked space ship could be sharpened into a blade and plastics from the interior could be fashioned into a frame.

"You can do it with time to spare!" Heeto said joyfully.

"We will use that time," Hal said grimly.

BEFORE night fell Hal and Heeto visited the caverns of Venus. Hal spoke to the workers, resting from their labors in the mountain range. He talked to soldiers, palace officials and the serfs who grew food in underground farms.

He told them how they could win a life of ease.

He spoke of liberty, justice and relief from tyranny.

Heeto shuddered as he listened.

"You preach revolution," he whispered. "It is treason!"

"I am sorry you are not with me, Heeto," said Hal.

"With you! I am ahead of you! Look!" Heeto held up a small triangle of rock. "I made it with my own hands!"

Hal Lawrence laughed.

As soon as the sun set, Hal made a trip to the space ship. He found a plate of steel suitable for his needs and he brought enough materials from the interior of the ship to fashion a rude guillotine, which now for the second time in history was to play a part in the founding of a republic.

At dawn the guillotine was taken into the royal palace.

"It won't work," Heeto whispered.

"It has to work," said Hal.

In the cavern came the sound of shuffling feet. A few workmen, just returned from the mountain range, appeared cautiously in the court of Dojo Ermos. Soon others appeared.

The crowd swelled until it packed every available inch about the flat-topped throne.

At the entrance of the cave the gong announced the rising of the sun. Once more there came the rhythmic tread of the palace bodyguard and again the dojo shuffled into the room.

His eyes quickly swept the throng, but they exhibited no surprise.

"I hear, Hal Lawrence, that you have been preaching revolution among my people," the dojo said. "You know, perhaps, that the penalty for treason is death?"

"I have not advocated the overthrow of your government, sir," Hal replied.

"You did not urge a revolution de facto, but you planted the seed," said the dojo. "But I need not worry. Today is your last day of life."

"No," Hal said. "Revolutions are not built in a day. It takes hundreds of years of oppression, such as the people of Venus have endured, to make people ripe for revolution."

"You insinuate—" The monarch checked himself. "Never mind. Hal Lawrence, have you an invention to offer?"

"I have, your majesty," Hal said, pointing to the guillotine. "It is a new machine for decapitation."

The dojo raised his eyebrows and stared at the frame and knife.

"I daresay it will not work. Are you willing to test it?"

"I am, sir," Hal replied, "but let me call attention to a matter of Venusian law. If a king has a man executed illegally, he himself must die. These people here —" Hal pointed to the crowd in the room "—have come to make sure justice is done today. If my machine works, I will have been executed illegally."

"But if it does not work you lose your head. I do not think it will work. You must prove it or you will be decapitated."

"If you order me executed, then the machine has caused my execution and it is a successful invention. Therefore I will have been illegally executed," Hal said. "In which case you also must die."

"AH!" THE dojo's eyes shifted uneasily toward the crowd of grinning Venusians. "I will not quibble. It is a clever trick, earthman. You have created a successful invention. For this you may have fifteen *nid* in which to be more clever—but next time you must not expect me to be so easily beaten."

"Thank you, sir," Hal said bowing. "And now all of my friends here have inventions. It is a coincidence, sir, that each of them have new machines for decapitation. I trust that each of them will receive fifteen *nid* in which to invent something else."

"I have been tricked!" roared the dojo.

"In my world it is called a strike," Hal explained. "It might even lead to violence—"

"Soldiers of the guard!" the dojo shouted. "Protect me."

"Sir," began the captain, "I beg to inform you that all of us have turned inventor, too. We have, coincidentally, invented new machines to decapitate—"

The king, trembling in anger, sank back on the throne. He turned his red eyes toward Hal Lawrence.

"What do you want me to do?" he asked.

"The first step is the repeal of the laws that hinder invention and the advancement of civilization," Hal began.

Throughout the night Hal outlined his plan to make Venus a world where happiness and comfort could be sought by all living creatures.

THE END

Pin the Medals On Poe

It took a writer three centuries dead to teach the Twenty-First Century's police the importance of the obvious!

By F. Anton Reeds

CENTRAL Police Headquarters was a scene of wildest confusion and the most confused of anyone there was Police Chief Xenephon Marks. His stubby gray military moustache bristled like the spikes of a Saturnian hedgehorse and his usually friendly face was purple with the humility of complete frustration.

"I tell you, it's no use," he screeched into the visaphone connecting with the

office of the chief of WBI, the World Bureau of Investigation in Washington. "We've turned this city upside down. We've quizzed every petty yegg that ever so much as saw a picture of Pher Nor."

There was a moment of silence, broken by the brittle command of the WBI chief.

"They've got to be there. Look again."

"All right," Marks bellowed, his moustaches dancing. "We'll look again. But you know this burg as well as I do. This is no space port. A Martian racket czar and two Venusian grox miners would be about as inconspicious as an albino dinosaur at a Rotarian banquet."

Chief Marks snapped off the phone and turned to the roomful of bluecoats.

"Come on, boys," he muttered.

His eye fell upon the well-built figure of Inspector Eddie Dugan, whose long legs draped negligently across the desk top while he tilted back, book in hand. The ever faithful Quinby Cobb, his rotund body bulging beneath a closely buttoned patrolman's uniform, sat as usual in a chair near Dugan, his idol, sleeping noisily.

Marks snorted.

"READING again, eh, Dugan? With the whole solar system going to pot all around you there you sit with your nose in one of those confounded story books of the ancients. What has that got to do with police work, I'm asking you?"

Inspector Dugan's clear gray eyes peered at his chief over the book top.

"This a book of stories by a fellow named Edgar Allan Poe."

"Was this Poe a policeman?'

Inspector Dugan grinned.

"Not exactly. But the old histories say he was the man who wrote the first detective story."

Chief Xenephone Marks grunted in disgust.

"Precious lot of good his detecting would do today. Think maybe he can help you catch Pher Nor?"

"Maybe," Inspector Dugan agreed and watched Chief Marks stomp out of the room, his bluecoat army at his heels.

The sudden silence awakened Quinby Cobb. He stared at the Inspector with bug-eyed surprise.

"Ain't'cha gonna look for Pher Nor?"

Dugan kicked his feet down from the desk and slipped the cheap little reprint volume into his pocket.

"You heard the chief say himself that it was no use."

He reached out and flipped on a televox. The face of a harassed newscaster leaped to life on the screen.

"—threw solar police into confusion," he was saying. "Despite assurances of the WBI and of Martian and Venusian police authorities that the trail of the arch public enemy, Pher Nor, and the two Venusian prisoners he is holding as hostages led to Midland City, the trail reached a blind alley tonight when Chief Xenephon Marks reported that no trace of the desperado and his victims could be found.

"The chase began three months ago when Pher Nor made a successful break from the prison mines at Navvar. Venus; walking unmolested through the gates marching two other prisoners before him at the point of a deadly pneumatic handgun. The two Venusians, political prisoners, are noblemen of the Dor dynasty whose lives are sacred."

An all-girl orchestra followed the newscast. Dugan reached for his pipe, lit it, and concentrated for several minutes on the pretty blonde violinist in the front row. Then he shut off the televox and turned to Quinby Cobb.

"WHAT does Midland City offer in the way of amusements this week?" he asked unexpectedly.

The plump policeman blinked incredulously.

"There's a televox star making a personal appearance at the Grand. And a burlesque at the Seven-Worlds with a red girl from Mars doing some pretty hot native dances."

"Too nice a night to spend in a theater," Eddie Dugan sighed. "Any circuses in town?"

"No circus, chief," Cobb drawled. "But there's a carnival.

Eddie Dugan looked at his roly-poly assistant with renewed interest.

"You have your own peculiar talents, Quinby," he said with a grin. "Tell me about it."

"It's a big one. The Solar Amusement Company. At the old circus grounds on Thirtieth, a block east of the Inter-City rocket station."

Inspector Dugan picked up his hat, jammed it on his head, and rose.

"Let's go."

Patrolman Quinby Cobb sighed heavily and lumbered to his feet.

"Where?" he asked.

The rangy inspector, grinning broadly, pulled a five dollar bill from a pocket and waved it before the startled eyes of his companion.

"To the Solar Amusement Company. You and I are going to take in the sights, Quinby. Even policemen need relaxation once in a while."

In the elevator on the way out of the building Quinby Cobb had a twinge of conscience.

"Gee, chief," he muttered, "We ought to be looking for Pher Nor."

"You never can tell," Dugan answered. "Maybe we'll run into him."

Patrolman Quinby Cobb, whose failure to observe small and seemingly unimportant details had often kept him from promotion in the past, did not notice the grim lines at the corners of the inspector's mouth.

A block from headquarters they took a gyro-taxi and within a few minutes the gaily lighted midway of the Solar Amusement Company was glistening beneath them.

Once inside the garish gates the lanky inspector had to accomodate his pace to that of the chubby policeman, who halted every few steps to gaze at the tall neon pictures depicting some new wonder from the far-flung corners of the solar system. As they passed the rows of games of chance the strident calls of the concessionaires were temporarily silenced. Before the gaudy front of the "Trip to Mars" show they both halted. Eddie Dugan dug into his pocket, purchased two tickets and strode through the short tunnel to the 'rocket ship', the rotund little bluecoat trotting at his heels.

THE lights in the 'ship' darkened, a swooshing roar rocked the little band of amusement seekers and they settled back to enjoy vicariously the thrills of space travel that they would never know in their humdrum, earthbound lives.

With a sigh that was not a sigh of content Inspector Dugan gazed through the porthole at the star illumined blackness that was by the magic of cunningly-concealed light transformed from strips of painted carnival scenery to the black reaches of outer space.

"I know what he's thinking, the poor young fellow," Quinby Cobb told himself bitterly. "He's thinking about the space patrol and how he'd give his good right eye to wear the red rockets of the Interplanetary on his sleeve. Fat chance he's got, stuck out here on the Midland City police force. It's a shame, too, and him studying every night and getting practically no fun at all out of life."

It made Quinby Cobb feel a deep inward sadness. Perhaps that was why he failed to notice the remarkable change in the young inspector as the 'trip' ended

as abruptly as it began and they were once more back under the lights of the midway.

For a deep content had settled upon Inspector Dugan and a grim smile twitched at the corners of his mouth.

"Freaks," he told Cobb. "That's it. Let's look at some freaks."

This time it was the inspector who followed the fat policeman as he led the way to the midway's biggest show.

"A Galaxy of Gargantuan Wonders from the Realms of Space," screamed the lighted banners. Dugan stared at the poetry, then abruptly entered.

The celophite tent was long and crowded, with double rows of pits and platforms down two long aisles. Just inside the door a score of the strange little *blix*, furry rock-eels from Phoebos, slithered about a moss strewn cage and a giant banner with a pointing arrow proclaimed that each and every twenty minutes the beautiful six-armed Princess Selalla would entertain at the rear of the tent with the sensational Dance of the Venusian Virgins.

Quinby Cobb was all for getting to the back of the tent at once.

"We might as well be on the front row, chief," he explained plaintively, but the tall inspector restrained him.

"We've got plenty of time," he said in a voice that brooked no argument and stood gazing speculatively at the rows of strange other-world creatures on the gaudy platforms.

Quinby Cobb eyed the inspector suspiciously.

"You looking for anything special?" he asked.

"Sort of," Inspector Dugan drawled without turning his head.

As they worked their way slowly through the crowd the metallic voice of the speakers throughout the tent announced that the Princess Selalla was preparing to entertain. There was a scurry for the back of the tent and Eddie Dugan and Cobb found themselves alone in the deserted aisle.

Quinby Cobb was preparing to follow the others when the steel hand of the inspector clutched his elbow.

"Take a look at that," Dugan gritted into Cobb's ear and nodded toward a platform at the inside of the aisle. The two figures on the platform might have been twins. Their skin was of a peculiar ivory pallor and their great high foreheads rose above thin, prominent noses—the typical features of the honored Ancient ones of Venus.

"They Baffle Science," the banner above them announced. *"The Living Dead—Found in an Ancient Tomb of Venus, Their Bodies Have Been Embalmed For 3,000 Years but They Are Still Alive.*

Dugan strode toward the platform.

The two figures seated on the platform were almost immobile, only the occasional twitching of a finger or a facial muscle proclaiming them alive.

"Doped!" Dugan grunted. "I should have known they would be."

He pointed to their long, thin hands.

"See those welts? And those blue stains? That's from three years in the prison mines. Only Venusian grox leaves that peculiar stain!"

The rotund Cobb gulped audibly. His eyes bugged and his jaw sagged limply.

"You don't mean—," he spluttered.

"That's exactly what I mean," Dugan said, his voice low. "Those are Pher Nor's hostages."

From an inside pocket of his tunic Dugan drew out a small kit and extracted a hypodermic needle.

"This should bring them out of it long enough to spill some highly interesting information," he told Cobb. Reaching up, he took the hand of one of the Venusians and felt the wrist with skilled fingers. Then the needle plunged into the ivory-white skin.

SUDDENLY there was a soft, almost inaudible sighing in the air about them and a tiny black hole appeared suddenly in the forehead of the creature on the platform. Dugan felt the Venusian relax in death. The sighing was there in the air again and a similar black hole burned into the forehead of the other figure on the platform.

Inspector Dugan jerked to one side and wheeled about in the empty aisle. On the platform across from him a banner said simply: *"Kee-Kee, One of the Strange Wooly-Headed Warriors from the Metallic Mountain Crags of Mercury."* There had been just such a creature there a moment before, with coarse ropey hair like strands of woven wool. Now the platform was empty!

"We'll have to work fast," Dugan grunted and hurried across the aisle.

Behind the platform he tore aside a strip of celophite sidewall and ducked out into the darkness. He found himself in a narrow alleyway between tents. Ahead of him he thought he saw a dark shape running. Jerking free a pneumatic hand-gun, he raced in pursuit. Behind him as he ran he heard the cumbrous clop-clop of Patrolman Cobb's oversize shoes.

The running form ahead twisted and turned down a labyrinth of dark passages behind the maze of tents, but youth began to tell and Inspector Dugan felt himself closing the distance to the fleeing man he knew was Pher Nor, the Martian outlaw. He could hear the man's labored breathing now. Suddenly the figure ahead was gone. When Dugan rounded a corner Pher Nor stood not ten feet away.

He was between two tents with his back to the open, crowded midway. The rope wig was awry and the sweated grease-paint of his disguise streaked his purple face. In his hand was the pneumatic gun with which, minutes before, he had murdered his prisoners.

Inspector Dugan's own gun was useless. To fire toward the opening in which Pher Nor stood would endanger the lives of those in the midway crowd only a foot or two behind the Martian.

As he lunged forward, Eddie Dugan felt a searing, nausceating pain in his right shoulder. He'd have to get that wound cauterized in a matter of minutes, he knew. The impact buckled his knees and sent him reeling against a guy-rope as Pher Nor charged past him toward the darkness from which they had come.

But in the moment that the Martian seemed destined to escape the bulky figure of Quinby Cobb lumbered out of the blackness and the two collided with a force that sent them both to the ground. Pher Nor was on his feet at once. But Dugan had pulled himself upright. He sprang forward, grappling with his one good arm for the Martian's knees.

THE pain of something wet and hot stinging the wound in his shoulder roused him. The drumming sound in his head resolved itself into a bable of excited voices. The green walls swayed and took shape and he saw that he was back in the office at Central Police Headquarters. A doctor was taping a last piece of bandage over his shoulder and Quinby Cobb stood over him, a foolish grin on his round face.

Two televisors, bearing the initials S. B. S. (Solar Broadcasting System) and I. B. C. (Inter-world Broadcasting Corporation) stood where the televox had been a few hours before.

Lanky, gray-haired James Winthrop, chief of W. B. I., stood smiling into the visa-plate and beside him was Chief Xenephon Marks, beaming like a proud and happy father.

"I know you who are watching the scene here from your homes in three worlds," the W. B. I. chief told his unseen audience, "will want to hear from

Inspector Eddie Dugan, the man who captured Pher Nor, aided by Patrolman Cobb, who has just spoken. I know, too, that you will forgive me if I do not keep him long, for he is tired and injured and he needs rest. I hope that tonight he may return with me by rocket to Washington as my special guest."

The W. B. I. chief turned to Dugan. Two policemen helped the young inspector to his feet before the visa-plate.

"We all want to know what led you to Pher Nor," the world police head told Dugan. "It is a pleasure to tell you that your exploit tonight has earned for you rewards totaling more than twenty thousand dollars, earth exchange; the offer of a commision as Ensign in the Interplanetary Patrol and medals for valor from the W. B. I. and from the governments of Mars and Venus."

Inspector Eddie Dugan felt Quinby Cobb's big hand thumping his good left shoulder.

"I sure will take that Ensign's commission," he told the police head with a grin. "And I reckon me and Quinby here can use that reward money. But I guess you'd better take the medals down to the bureau of public archives and pin 'em on the bust of Edgar Allan Poe."

"Poe?"

The face of the W. B. I. chief registered surprise.

"Sure, Poe." Eddie Dugan's grin broadened. "He wrote a story once called *The Purloined Letter*. About a fellow who wanted to hide a letter. He knew that folks who wanted that letter would practically take the joint apart. So where do you suppose he hid it? In a letter rack in plain sight on the wall. That gave me an idea. A Martian and two Venusians slinking around this town would be pretty easy to spot. I figured there was only one place in Midland City that you could see three people from other worlds and not get suspicious—at a circus or a carnival. In order to hide, Pher Nor had to get himself in plain sight in front of as many people as possible. So I guess Poe should get the credit for his capture after all."

Quinby Cobb let out a bull-throated bellow that was heard with infinite glee in the living rooms of three worlds.

"Gee, Chief," he bleated, "we never did get to see that Princess Selalla."

THE END

TALES TO COME

THE youths were gathered in numbers of some hundreds around the giant white star, amongst them an air of interest and excitement as they watched the planet-swinger.

"The system will crumble," murmured the green-light, Luminescent. "But if Swift succeeds in making this new planet settle to a stable orbit, it will form the largest and most complex solar system we have ever created."

"Swift will do it," her companion, Star-Eater, said confidently. "If only Sun Destroyer doesn't come along now!"

"I hope not, too." A nervous stream of sparkles was suddenly erupted from Luminescent's young, thirty-million mile body. They turned their full attention on Swift and the planet he had created and was now swinging in great circles through space.

Abruptly he stopped stock still at his pleasurable task. His young, spheroidal body quivered.

He was not alone. The others felt what he felt. The beat of a life-force, a vibrancy they knew well, impinged upon them.

A single thought went from creature to creature, like a wail.

"Sun-Destroyer!"

She came flashing toward them, thrusting suns to the right and left in chaotic abandon, her body replete with power, throwing off streams of luminescent energy as she discarded her wasteful excess, the fifty-thousand mile green light at her core waxing and waning with steady pulsation.

The group froze and watched her.

She came up to them, ceased motion with one thrust of her parapropellants, and swept her visions over them. "What do you do?" her thought beams asked. There was a note of contemptuous mirth in her tone.

"We do nothing," said Swift, taking the initiative. "Go back where you came from, Sun-Destroyer. We do not want you here."

Sun-Destroyer, ignoring him, turned her visions to the planet held on the end of his tractor beam. "A solar system!" she said admiringly. "And a very complex one. Very good. I will help you with it."

"No!" said Swift with rising fury. "Go away, Sun-Destroyer. If you—"

But abruptly she was contracting to half size. Pure energy was pressed together in her body with a blinding display of heat and light. The group saw a new planet formed and abruptly hurled, without aim, at the created system. A hundred outraged cries rang out as the planet caught the outermost planet in its path, went on, and reduced a full dozen of the orbits to shattering ruin. The whole Sun shuddered rackingly and prominences leaped out. Planets faltered and fell by the dozen into the maw of their disturbed primary.

Where the beautiful complex creation had reposed was nothing but a crumbled system.

Sun-Destroyer laughed scornfully. "It was no good! Utterly worthless!" she said, then thrust out her propellents and rushed away across the galaxies, reaching out in sheer, anarchic abandon to crush a half-dozen suns into powdery dust. She was gone before they could protest. . . .

"Daughter of Darkness" tells of the life of unhappy Sun-Destroyer, the child of the hero of "Into the Darkness." This novelette by Ross Rocklynne leads off the next issue of *Astonishing Stories,* along with nine other complete stories by Ray Cummings, Isaac Asimov, L. Sprague de Camp and L. Ron Hubbard, and many others.

FACTORY in the SKY

The basic weapon of future wars will be Production, not guns . . . and no holds barred to sabotage a plant!

THE spacebus from the suburban asteroid, Norwalk, was barely crawling through space. The great hulk swung clumsily out around a stalled space coupe and headed again toward the gleaming spot of light that was *Factory in the Sky.*

Impatiently I looked at my watch and swore. We had been late twice last pay period.

"Overtime next period, Mike," red-faced old Neal Hutter said cheerfully. "This war between the Jovian moons—the Confederacy—and Mars, has boomed the construction of space cruisers. Earth has cancelled or back-ordered the fleet we were building for her and is giving every assistance to Mars. Says Mars is her first line of defence, just as though Mars was always between Jupiter and Earth!"

"Inner circles have to stick together," I grinned. "I can stand a little extra money too. After working several months in Zuber's Canning Factory on Lundar, hothouse asteroid belt y'know. . . ."

"I've been there," nodded Neal Hutter knowingly.

"Well, after that," I said, "it seems wonderful to have a few dollars in your pocket and some place to spend them. I feel like a human being again. In another pay period or so I am going to invest in a used space coupe and rocket to work."

"Not for me," Hutter shook his bald-domed head sagely. "Traffic is too congested here among the asteroids. Another space car smacks you; your old bus springs a leak, and there you are—gasping like a mudfish in the middle of the Martian desert. Nope, I'm sticking to the bus."

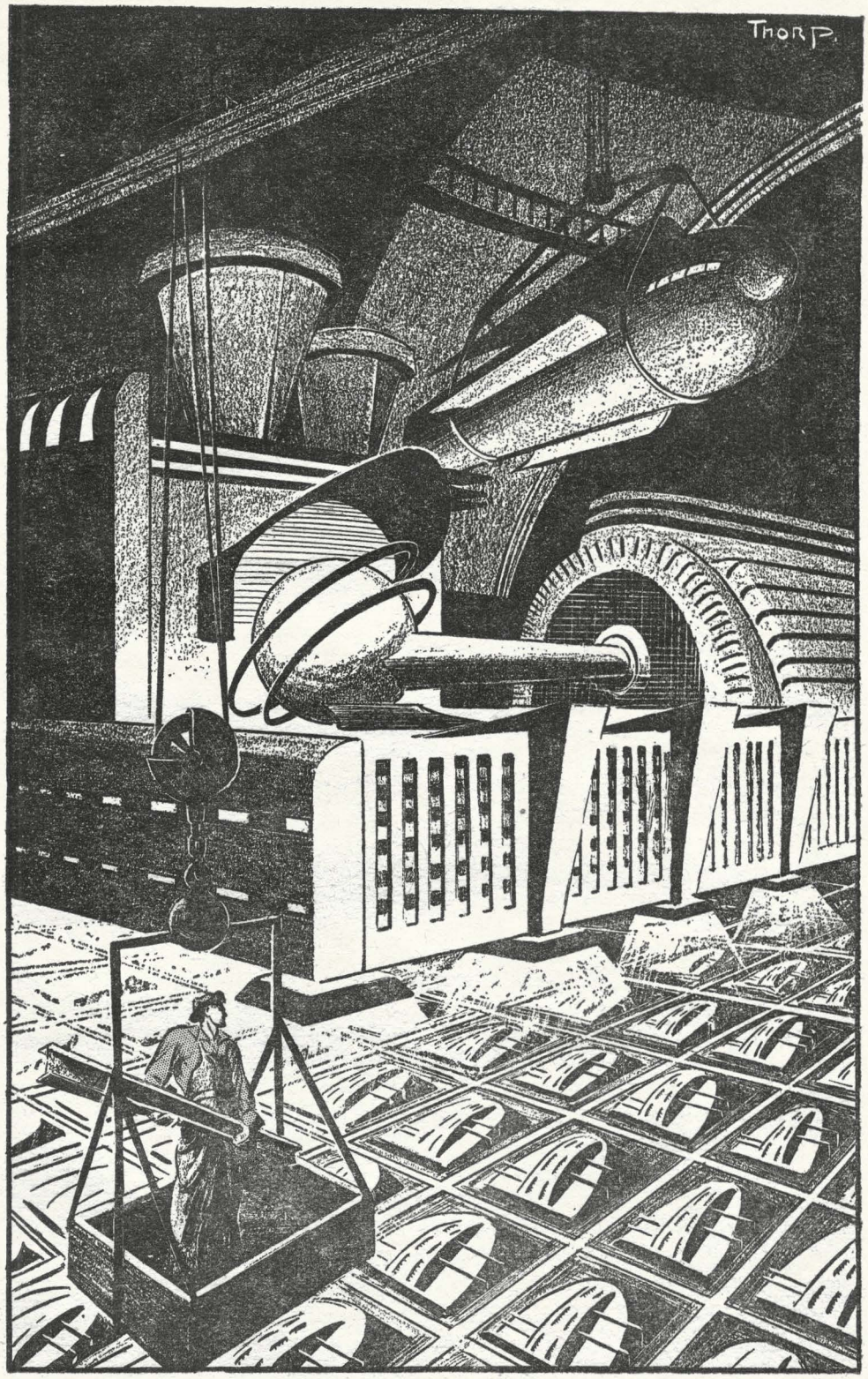
The vast spinning sphere of *Factory in the Sky* loomed above and ahead of us, gleaming white against the unfathomable jet depths of surrounding space. About the thirty-odd miles of The Factory's circumference, anchored securely to its vast metallic skin, were spaced a score or more smaller half-spheres where experimental, executive, production, personnal, advertising and various other departments had their headquarters.

Here on the rim of the clustering asteroid belt between Mars and Jupiter were the mammoth shuttle ships—luxurious globe ships for passengers—the swift cruisers of the Patrol, and the grubby little ships of the asteroid prospectors and freighters constructed, serviced and repaired at *Factory in the Sky.* Twenty million men, women and children lived here in the airless void, dependent for their living upon the continued construction of new and better space ships.

Less than half a million of the workers were employed in the construction of the great ships; the balance worked on the hothouse worlds where vegetables, fruit and animals were grown, or in the three outer levels of The Factory where a thousand small factories leased space and produced their own specialized products.

"FOUR minutes!" I snorted, hooking my fingers through the plastide strap of my lunch kit as the bus eased upward toward the ceiling of the parking lot.

By Basil E. Wells


THORP

The bus slipped between two hanging squat brown towers. Its magnetic anchor gripped the Factory's metallic skin securely; twin hollow tubes of metal snapped outward to contact and seal against the reversed towers, and the locks swung open. Air whooshed softly between the tower locks and the ship.

A seething mob of men and women poured out of the bus, a numbered metallic gate badge—bearing the clear-cut reproduction of each employee's features—on each outthrust wristband. Hurriedly they passed beneath the invisible eyes of the robot scanners and analyzers . . . Only once had I seen a spurious badge detected and its owner arrested by the guards.

Up a moving ramp we rode in a concerted smooth flood of close, wedged human heads, upward for three levels through a drowsy murmur of buzzing, humming machines.

Abruptly the sensation of climbing upward ceased and we stepped off the ramp upon the fourth level of the gigantic sphere. A firm pressure was beneath our feet now, an artificial, centrifugal sort of gravity.

I weighed almost five pounds on the fourth level!

The long line of men and women snaked past the clock. Even as I reached it and my card clicked its intricate mechanism, the hoarse throaty shriek of the shift whistle sounded above the incessant roar of acre upon acre of whirring clattering mechanisms.

I took a swift-moving band set flush with the floor, a conveyer for raw material and the finished products alike, and opposite my set of three machines I stepped off. A skeleton-thin, dark-skinned man, Wolfe, nodded jerkily.

"Machine Three's having fits," he growled as he snatched up his lunch kit and stepped upon the moving band moving in the opposite direction, "dies all shot. Inspectors rejected the last order of cases I sent over."

MOST of the first half of the shift I spent working on Number Three and tending the two other automatic machines. An hour before lunch period I finished changing the dies; heaved a sigh of relief, and leaned back against the slender vertical girder beside Number One.

Beneath my feet lay the three outer levels of the Factory where the thousands of articles for domestic consumption were produced—refrigerators, electric stoves, solar generators, shoes, cloth and furniture. . .

We were, and are, self-sufficient in space, the twenty millions of us living about the Factory, what with our transparent hothouse planetoids, our inexhaustible supply of metallic space debris for raw materials, and the frozen drifting spheres of oxygen, hydrogen, nitrogen and the other gases to replenish our atmosphere as it leaks gradually away.

Above my head, inward from the vast hollow globe's outer skin, a dozen more levels were located where the various bulky parts of the space ships and their powerfull little tenders were stamped-out, machined and finished. Inside the great hollow shaft that pierced the ten-mile diameter of the Factory from artificial pole to artificial pole there were a dozen ships in the process of construction by space suited workmen—great half-mile spheres of metallic alloys and cold resistant, sturdy plastics that would never feel the oxidizing, corrosive atmospheric blanket of a planet pressing against their thick sides.

Pioneering rockets had blasted directly between Earth, Mars, and Venus, a procedure requiring a prohibitive amount of liquid fuels. Later the short jump from Terra to Luna, and from Mars to Phobos and Deimos, was made in a light cruiser, and the passengers were there

transferred to a luxurious space liner—still at an excessive cost. Finally, the procedure so well-known in this year of 2160, came into being—the majestic rounded ships from the Factory picked up their passengers from sturdy little planet ships a few thousands miles above the surface of the worlds.

Like planets in miniature were these globe ships, their interiors a green riot of oxygen-freezing plants, trees and flowers. Out in the void gravity was practically non-existent and their massive bulk weighed practically nothing—fuel consumption, consequently, was very slight. . . .

All this I thought as I leaned back against the post watching the glittering clacking cams and eccentrics of my machines blurring with speed as they stamped out empty rocket cases for the Martian space fleet's small rocket guns.

Idly I opened my tool box and lifted a dull-surfaced box from it to the top of Machine One. Small it was, smaller than the palm of my hand, but in the square, glassed aperture in its center a light glowed as I twisted an inset knob.

The little box was a spy ray that had come into my possession a few months before while I was working in Zuber's Canning Plant on Lundar. And spy rays are forbidden by interplanetary law, a law stringently enforced by the Interplanetary Patrol Corps. If the snoop-window, as all criminals called it, was found in my possession—well, I would not be working long in the Factory!

I shifted the tiny dull block around, centering its X-ray eye upon a sleepy looking operator across the aisle. I regulated the range. . .

Adams, the other proprietor, had a silver plate covering a hole in his skull, trepanning operation, and a knot of silver wire showed in his right knee. Apparently Adams had had a few accidents in his lifetime. There was a knife and two nickel alloy coins in his pocket and the zipper along the side of his single coverall-like garment of bluish spun glass was made of aluminum.

I had shifted the spy ray around to another operator, a hard-eyed moustached man named Yaeger, and had noted that a key-ring and a zippered billfold were the only metallic objects in his pockets, when I saw the assistant foreman of Section 27-F-4 come drifting down the narrow aisle between the sets of machines. I dropped a handful of waste over the snoop-window where it rested on the machine's unscraped rough surface and was gauging the rocket cases as they clicked out of the dies when he came up beside me.

"Dies changed?" he shouted above the chatter of the hundreds of machines about us.

"Yes sir!" I called back at him. "Cases smooth as velvet now."

"Good thing," the assistant growled sourly. "Production is howling about too much scrap. Watch it."

The bronchial squawk of the whistle sounded out across the sea of surging, rhythmic sounds. Lunch period! Electric motors clicked off and stopped. Silence rang deafeningly in my dulled ears. Men hurried between the idle rows of machines to the time clock; then returned to eat their lunches.

I TOOK a last bite of the raisin pie—asteroid-grown grapes they came from—drained the thermos bottle of coffee, and closed the bucket with a click.

Neal Hutter and two of the older men always ate together a few machines away; so now I joined them.

"Sure we'll be in the war," buck-toothed scrawny Hites mumbled from behind a huge bite of sandwich. "Here we sit, exposed between Mars and the Jovian moons. If Mars gets licked we're outside her sphere of influence. Earth

can't see that happen. The Factory produces nine-tenths of all the spacecraft engaged in interplanetary service. If the Confederation wins, the plant will be dominated by it. Where will that leave Earth and Venus?"

"We're safe enough here," grunted Adams, he of the trepanned skull and the wired-together knee. "Our fleet of rocket destroyers and robot torpedoes make us invulnerable from attack."

"From the outside, yes," drawled old Neal Hutter. "Ever hear of sabotage, boys?"

"Not here," scoffed Hites, gulping down an unchewed slab of Martian thilad pie. He belched politely before continuing. "All the men from Ganymede, Io and Europa have been deported or put to work hollowing out the vacant asteroids about us. Besides, the I. P. C. keeps men planted all through The Factory."

"Point one of them out to me," I laughed scornfully. "That's just a story going around to freeze up any Jovian sympathizers!"

"Maybe so," Hutter muttered, his eyes intent on the floor, "but these patrolmen, or I-men as the newsrags have it, are masters of disguise. Adams, here, might be one."

"After working here with us for the last ten Earth years?" Hites snorted. "Huh! I've worked beside him for the last seven. More likely be some new fellow like Mike Terry here. If he wasn't so mouthy I might think so. I. P. C. men don't blast their jets all over the place like he does."

Why, you. . ." I began, doubling up my big-knuckled fists.

Hutter winked at me and I let my balled fists unknot.

"Cool off, Mike," he said quietly. "Hites is just kidding."

"Okay, okay!" I replied. "Better get back to my machines. See you later, Hutter."

"Oil my machines up too," Hites called after me with a shrill cackle of laughter.

I PULLED aside the waste that concealed the snoop-window and pressed the automatic button. By some slight movement of the box, perhaps the machine's vibration, it now cut across Yaeger's middle where he sat on an inverted scrap can with a greasy-looking runt named Ensen.

I whistled and adjusted the spy beam carefully. Two luminous capsules, one end of them alight with a peculiar radiance, showed clear against the shadowy outlines of Yaeger's crouched body. They had been in his metal lunch kit! I had not spotted them before.

I wondered what they were as I shifted the snoop-window's invisible probing finger toward Ensen. I started and my jaws clicked together. Two more of the strange rounded objects showed around Ensen's waist!

From an idle game of illicit prying this was fast becoming something else, something grim and terrible. . . .

I palmed the tiny case in a handful of waste and stuffed it into my pocket as I oiled my machines. Out of the corner of my eye I watched Yaeger and Ensen drift into the washroom and after a few moments emerge again. I chanced a brief flash of the snoop-window.

The four glowing objects were gone!

Automatic presses chattered and roared lustily about me half an hour later as I nodded to Adams to watch my machines and headed for the washroom. The doors swung inward. I smiled grimly. The place was empty.

Swiftly I produced the spy ray and held it close against my stomach, shielded from the outer door. A second's swift circle of the walls showed me the location of the glowing capsules—among a cluster of waterpipes and an exposed

metal girder in a neglected corner.

"Good Lord!" I gasped as I fished out the four, finger-like tubes, "enough iron catalyst to blast The Factory wide open!"

The slender rounded rods were simply soft plastic containers divided into two sections by a wax plug. Powdered iron was in one end of the little bomb and the iron catalyst (first discovered on Luna in 2078) packed into the other end. Some tiny mechanism, timed probably for the end of the shift, would open the plug between and the catalyst would unite with the ferric dust to produce a raging, unquenchable flare of terrific heat. The pipes would provide more fuel for the spreading atomic conflagration and then all of *Factory in the Sky* would gush outward in an intolerable, exploding wave of cosmic flame.

Yaeger and Ensen—saboteurs in the pay of the Jovian Confederacy! It was hard to realize that the men of the outer moons, claiming common ancestry with men of Earth and Mars, could contemplate such a hellish mode of waging war. I knew that it was not the common people of Jupiter's moons who wanted war—the rank and file never want war until their leaders wave the hot red flag of Jovian, or Venerian, or Aryan superiority. . . .

My jaw hardened stonily and ice ridged chill along my backbone.

Then I considered. What if I reported their treachery? Other agents would be warned; my purpose in gaining a job inside The Factory would be revealed, and my life would be constantly in danger. I could not afford to have my secret mission inside The Factory revealed this late in the game.

I couldn't even prove that Yaeger and Ensen had planted the bombs. I might even be accused of planting them there myself!

I slipped the deadly little packets of destruction gingerly into the pocket of my coverall garment, atop the illegal snoop-window. It would take some tall explaining now if a company guard were to search me!

"NEAL!" I said to the red-faced old operator a short time later, "how about helping me pull a joke on Yaeger and Ensen? They planted a couple of—uh-rotten eggs in my tool kit a while ago. Here they are, wrapped up in paper towels. How about slipping them in their hip pockets as they ring out? You're right beside the clock."

"Why sure, Mike," Hutter agreed, his keen old eyes level and squinted curiously. "Sure it was them?"

"Saw them," I told him.

"Dirty trick to play," Hutter growled. "Mess everything up for a long time if the eggs happened to break, in your tool kit."

"Yeah," I agreed, "lucky I caught it in time."

A thin-bladed sliver of steel that Hutter used to clean bits of loose metal from his dies snapped off short in his tense fingers against the machine. The ridges along his long jaw softened and then he winked at me.

"Your two machines have stopped," he told me. "Better get busy before old Foghorn sees that only Number Three is going."

Once the three machines were again busily engaged in snapping out rocket cases I slipped the snoop-window back into the false bottom of my tool box and finished cleaning up the machines until time for the next shift. I hung back until I saw Yaeger and Ensen bolt for the time clock and then hurried to get there a split-second before them.

I fumbled with my card in the machine while they impatiently shoved against me. I swung around belligerently.

"What's eating you two guys?" I demanded. "Got the space jitters?"

"Get a move on, Windy!" snarled Ensen nervously, his eyes on the square, numbered face of the time clock.

"Windy!" I yelped angrily, pulling back my fist threateningly.

Hutter winked imperceptibly at me over their shoulders. My arm dropped and I moved out of the way. No telling how long it would be until. . . .

Hutter and I joined the swift-moving line of homeward bound workers. Down the ramp we were swept along down to the bus magnetically anchored below us.

I took a seat next to the dulled transparency of the porthole and a moment later watched Yaeger and Ensen, in a sleek scarlet-hulled space-coupe, blast swiftly downward away from the tough outer husk of the Factory.

Then the bus was dropping away from the spinning bulk of The Factory, heading toward suburban Norwalk, five hundred miles away. I watched the fading red blasts of the traitorous workers' coupe until it was lost in the congealing murk of surrounding space.

Suddenly a vast mushroom of light blossomed soundlessly out there in empty space. I settled back in my seat. That was the end of them. *Factory in the Sky* was safe for the moment. . . .

THAT night I. P. C. Operator CY-1178, Neal Hutter by name, sat grimly in my room watching as I flashed a coded message to the I. P. C. base on barren Aison, a fortified asteroid nearby.

"WC220 reporting," I told them. "Plot to destroy Factory averted. Catalyst bombs. Check recent shipments of catalyst. CY1178 and myself accounted for agents and bombs without detection. . ."

"Simple and sweet," nodded Hutter. He smiled. "You talk too much, Windy," he added, "to be an I-man!"

THE END

The Plague From Tomorrow

The malaria that the man who called himself Olson had brought to the Indian swamps was bad enough, but he had brought an even worse disease—a drug-like longing for the vibrations of his presence!

By Frank Belknap Long

GRAHAM wanted to shut the door on his job with a good, loud slam. He wanted to take off his—no, wait. Anything requiring muscular effort was out. What he really wanted was an opportunity to spend the rest of his life in a hayloft, flat on his back.

Everything else was secondary. His nerves were throbbing, his muscles ached and something was wrong with his speech. Certain words stuck in his gullet and gagged him. He had to take a deep breath before he could say "Indian" or "Malaria" and he felt physically ill when the words came out.

There was nothing worse than ungrate-

fulness, nothing that irked a man more when he was dog-tired and in need of a little sympathy. The Indians knew that he was getting the swamp drained for them, and doing everything in his power to clean up the district. They knew that he was working for a big, miracle-performing Chief who sat beneath the dome of the Capitol Building in Washington, and drew strength from the rivers, mountains and valleys of forty-eight states.

But knowing all that they still wanted to get out of bed and drive back to the Indian reservation in their 1923-Model T's. Something was being handed out back there which seemed to intoxicate them, so that they had to be brought back to the barracks under duress. It wasn't alcohol. Graham had checked on that. His job was to examine all the charts and dash around on stilts.

The malaria was just as depressing. It was the bad estivoautumnal variety, which Indians living in the United States were supposed to be immune to. It was the malaria of severe districts and lush tropical jungles and when it got into its stride there was no stopping it. The Indian Bureau had sent Graham out to erect temporary barracks and drain a swamp which was in all respects miasmal.

Graham was a youngish, firm-jawed man with a clipped red mustache and eyes that gave off sparks when he became excited. He wasn't excited now, however —just dog-tired and miserable.

HE WAS dipping his hands in a one in two thousand solution when a burly orderly appeared in the doorway of his off-duty quarters. "Doc, a well guy just walked in and asked for treatment. What'll I tell him?"

Graham frowned. Withdrawing his hands from the antiseptic wash, he reached for a towel and dried them with great deliberation.

"An Indian, Malone?"

The orderly shook his head. "No, Doc. He's a big, blond guy with side-whiskers. His eyes made me feel so damned queer I couldn't think of anything to tell him."

"Side whiskers?"

"That's right, Doc. Like in pictures of old Vice-Presidents of the United States. But he's wearing Indian clothes, and—"

"He doesn't *look* ill, you say?"

"Doc, I never saw a healthier looking guy."

Graham's frown increased in volume. "You ought not to form snap judgements, Malone," he said. "I've seen men with pernicious malaria who looked as well as you do."

Malone turned pale. "You mean I could be—"

"Forget it, Malone. There are little indications but it takes a trained eye to spot them."

"Gee, Doc, you had me scared for a minute."

"I told you to forget it."

"Just as you say, Doc. But what'll I tell Goldilocks? He's sorta big and hard to handle."

"I'll go down and have a look at him," Graham said.

His features were twitching when he accompanied Malone downstairs but when he stepped into the recovery ward and saw what was happening there he pulled himself together with a jerk.

The recovery ward was in an uproar. The Indians were jabbering like maniacs and running back and forth between the cots. Two of them were flat on their backs on the floor, pinned down by Amazonian nurses. One of the frailer nurses was standing between her patient and the door, and threatening him with a broomstick.

"Get back into bed," she warned. "You ought to be ashamed."

He was an old Indian, doddering, racked by fever, but he kept trying to dodge past her, and get out.

Five of Graham's cases escaped from the ward before he could get the others quieted down. Not entirely quieted, for they continued to jabber between the sheets, but it was reassuring to know that they had regained control of their reflexes and could be cowed by hypodermics. They knew what hypodermics could do, so the actual injection of morphine into them wasn't necessary.

Graham was breathing harshly when he stepped into the admission department to receive another jolt. Waiting in the admission department was the strangest looking human being he had ever seen. He had a chest like a brick wall, and was so abnormally long-waisted that he seemed much shorter than his six feet five. Light yellow hair crowned his pale brow.

NOT a muscle of his face moved as Graham looked him up and down. There was something vaguely patronizing in his manner which infuriated the medical man.

"Well?" he snapped. "What did you wish to see me about?"

The giant grunted. "Name Olson," he said. "Me sick. Me very sick man."

"This is not a clinic, you know."

"Not a clinic. Me know. You cure here. Malaria bad."

"You haven't got malaria," Graham rapped. "I can tell that just by looking at you. No rings under your eyes, no sallowness."

"Me very sick man. Me need cure fast."

"Let me see your fingernails?"

Olson nodded and extended his powerful hands.

Graham stared, gasped. "Hrumph," he said.

"Malaria bad," the giant reiterated, and folded his arms on his chest.

Graham went into instant action. He

leaned over the admission desk and pressed a buzzer. He ruffled papers, a slow flush creeping up over his face. There was no mistaking the significance of those gray-blue splotches at the base of the giant's fingernails. Or the small, hard pulse he had felt beating in the giant's wrist.

Malone came in and stood waiting for orders, his gaze riveted on the giant's face. Olson returned his stare haughtily, standing straighter than a sick man had any right to stand.

When Graham turned he barked orders. "Malone, this man has malaria. It is fortunate that he came to us. Tell Dr. Craig I shall want a blood examination and a therapeutic test. Oh, yes—tell him to send the diagnostic chart to me. We'll put him in Ward 3. Tell Craig this is an unusual case—no herpes, lividity, or urticaria. A walking case, probably estivoautumnal type."

"I can't remember all that, Doc. Could you write it out?"

"Just tell him it's a walking case and the patient mustn't be kept on his feet. Then a blood test, a therapeutic test, and the chart. Have you got that?"

"I—I think so, Doc."

"Good. Take him out."

FIVE minutes later Graham was pacing his off-duty quarters, his brows furrowed. So the little mosquitoes who squatted down with their bodies slanting upward were feasting on white men now. There was no reason why they shouldn't. In epidemic malaria they usually feasted indiscriminately. But so far white men had been spared. It was no end puzzling.

He was still pacing when a voice said behind him: "Could you spare me a minute, John. I've got something here that is turning my hair white."

Graham wheeled. Standing in the doorway was the youngest member of the medical staff. Paul Malkin was holding a five hundred and fifty dollar microscope which had gone through John Hopkins with him, and was something special in the way of precision.

Graham said: "That's all right. Come in and sit down."

"I'll stand if you don't mind. When you've looked at this you'll need that chair for yourself."

He crossed to the window and set the microscope down on Graham's personal filing cabinet.

"It's blood from one of the gorged mosquitoes," he said.

Graham nodded. He had been intending to go into a huddle with Malkin on that very problem. The mosquitoes had been caught on the reservation, and were presumably gorged with Indian blood containing Haemosporidia.

"Did you ever see a precipitate like that, John?"

Graham stooped and glued his eye to the microscope. There was an expectant look on his face. Slowly as he stared his expression changed.

"Good God," he exclaimed.

"Did you, John?"

"No, I—"

"It doesn't type."

"Obviously not," Graham muttered. "But it seems to be human blood."

"A donor with blood like that would starve to death. He'd have to hawk his wares on the dark side of the moon."

"It's a little like three," Graham said. "If I wanted to be fanciful I'd call it *evolved* blood."

"I see what you mean. There is a complexity of structure which—yes, human blood might evolve into something like that. In 20,000 years."

"I've got Olson's chart here, sir," said a voice in the doorway.

"All right, Malone," Graham said, without turning. "Stick it in the letter rack."

Malone obeyed, hesitated an instant,

and reluctantly ceased to decorate the doorway.

Graham straightened, a puzzled frown on his face. He crossed the room in three long strides. He picked up Olson's chart and ran his eyes over it.

Malkin heard him suck in his breath sharply.

"What is it, John?"

Graham wiped sweat from his forehead with the back of his sleeve. "It's hot in here," he said, unsteadily.

"Huh? Oh. Yeah, it is hot. But you get so you don't notice it."

"We ought to notice things more. It was standing out like a sore thumb all over him."

"What are you talking about."

"His *differentness.* I thought he was just a big, dumb Swede. I didn't know I was looking at a lad Barnum would have traded in the Cardiff Giant for."

"I still don't get it."

"The blood in that mosquito apparently came of a big, blond giant named Olson who walked in here an hour ago, and asked for—"

"What he asked for he got, Doc. Craig gave him a ten grain injection and put him to bed. But he ain't in bed now."

MALONE had reappeared in the doorway. His uniform was crumpled, and his face was streaked with sweat. "He must have gone clean off his nut, Doc. We couldn't hold him. I never seen a guy fight the way he did. He locked his thumbs together and *chopped.*

Maybe I'm getting soft or something, Doc, but with a heeled guy you at least know what to expect."

Graham opened his mouth, but no words came out.

"Doc, he beelined for the supply room, and pried the lid off a packing case before I could—Doc, I don't like to say it, but for a minute I was out like a light. When I came to he had grabbed himself an armful of syringes and quinine eggs, and was heading for—"

"Where is he now?"

"With the Indians, Doc."

"You mean he's back in the ward."

"There are no Injuns in the ward now, Doc. We couldn't hold them either."

Even a badly jolted man can perform mechanical acts. It took Graham scarcely ten minutes to get from the barracks to where he kept his car, which was really nothing more than an instinctive act—a travelling by route. It took him five more minutes to fill the tank with gasoline—a reflex.

Getting into the car, starting the engine and building up speed until he was in the roaring seventies was just his subconscious telling him to hurry, hurry, and his body responding like a drill sergeant's dream of how a body ought to act.

His brow was knitted when he came out of it and found himself approaching the reservation over a macadamized state highway, with moonlit stretches of low-lying countryside sweeping past on both sides of him.

Although his fleeing patients had a head start of at least thirty minutes he was confident that he could overtake them. In the first place, they were Indians and to Indians *speed* was the name of an extremely malign devil who wrecked cars by night. In the second place—

He tried to shout, to warn the man, but before he could do so the crazy fool's body rose level with his face, and went shooting off into darkness.

He stopped the car with a skidding, grinding jolt, stepping on the brakes so abruptly that he was thrown from his seat. How he escaped injury he never knew. When he pulled himself level with the windshield the first thing he saw was a soggy ditch, and a big, blond giant with a badly cut face sitting on the opposite side of the glass staring in at him.

The car was tilted at a forty-five de-

gree angle, and was partly in the ditch. The man was really further up toward the road than he was.

He *wasn't* Olson. All the tension of sleepless days and nights erupted inside Graham's head. He clambered out of the car and advanced toward the giant on wobbly knees, his temples pounding insistently.

The big man made no attempt to rise. He just sat in the ditch shaking his head and staring up at Graham. His jaw was twitching.

"Name?" he muttered. "Olson. Bill Olson. I'm free now, y'hear? Free, *free.* It's all over and done with."

Graham stooped, and shook him. "Easy, man," he soothed. "Go steady."

"No more pain. He promised. He never wanted to—"

Olson seemed to forget what he had started to say. His jaw tightened and he shuddered convulsively.

"Never wanted—" Graham urged gently.

"To torture me. It was the Indians first, then me. He had to find out. He was lost and half-crazy, with all his crew down sick. Inside that tower which he says is a ship, though I'll be damned if I can figure out how he could—"

"Easy, Olson. Try to think back and get it straightened out, so that I can help you. Who is *he.* Where did *he* come from?"

"Help me? There's only one way you could do that. *Take me away from here.* I can't trust myself. I still want to go back. Right into the tower, to suffer again, to—"

"Olson, who is *he?* This man—where did he come from?"

"From right here on Earth. But he says we'll never see the harbor he set sail from, because it ain't in existence yet. And it won't be for fifty thousand years. Oh, God, how I want to go back. It's like a drug."

A CURRENT of warm air blew up from the roadside and coiled around Graham's brow, ruffling his hair. Something nibbled at the edges of his brain and went scampering away to hide itself in dry leaves at the margin of a bottomless pool. "Olson, stop raving. What you're telling me doesn't make sense."

"Doesn't—make sense. You're right. You're right about that. I thought the same thing myself. Even when he started—probing. A fellow like myself, a migratory worker, gets used to crazy folk. You ask for a job anywhere and beside you there is sure to be standing a guy who is not quite right."

"You mean he was working with you?"

"Not him. I bumped into him on the road. A big, barrel-rolling guy, with yellow hair. I'm husky myself, but from base to tip this guy was so blistering big he scared me. He couldn't speak much English—just a little Injun talk that wouldn't jell. Even Injuns don't—"

Graham's hand tightened on Olson's shoulder. "Just tell me about the tower."

"I must have fainted or something. One minute he was asking me questions that sounded crazy, and then I was lying on my back in the tower, on a sort of stone bench, and he was bending over me and trying to get into my mind.

"He got in all right. And when he got in I started screaming. He said it was a power he had, and we'd get in fifty thousand years. All his people had it. And because his people had it they could take it. It was give and take with them—and no pain. But our brains couldn't stand the vibrations yet. Inside my head a live coal was spinning around and around, but he didn't know that.

"He couldn't tell from the Injuns. They are stor—storkical. An Injun never lets on when he's in agony. He knew I was suffering, but he didn't know I was in agony."

"When he found out he told me he'd have to go right on probing. His eyes got soft and sorrowful, just like a woman's, and I could see that he was suffering too. He didn't want to hurt me. But he said that if he didn't probe his men would all die.

"There were a lot of things my brain could tell him he couldn't get from the Injuns. The English he had picked up from them wasn't worth ten cents in any man's money, so he couldn't just ask me.

"His men were sick with a disease which he called *garaba.* He said it was caused by the bite of a little, flying bug—a *ginit.* I don't know much about medicine but we got together on it and decided that what his men really had was malaria. Yeah, and ginits were *mosquitoes.*

"Damned funny is right. His brain and my brain working together doped it out. I was in hell, see, and I had to get out. Somebody throws a guy who can't swim into a lake, and he swims anyway.

"He asked me if malaria was the big, number-one disease in my country. I told him it wasn't. He said it was in his. His people died from garoba like flies. It was swamps, he said, and his people couldn't kill the ginits because swarms of them filled the sky until the sun was blotted out.

"I said we had a few mosquitoes waiting around to bite any guy who had it, but in the United States it was almost an extinguished disease. He said his men had caught it from ginits in his country and now their teeth were chattering and he was nearly crazy with worry.

"He said something then I couldn't make any sense out of. He said his country was right here, but that he had travelled fifty thousand years. Not miles—*years.* He was lost, he said. His navigator was down with it, and his assistant navigator, and he was lost and sick.

"How do you cure it in your country, he asked. It hit me all at once. Our mosquitoes had bitten his men and the Injun epidemic which is raging over on the reservation was something he had brought from his country into ours. I told him about the barracks the Government is putting up, and the mighty fine doctors he'd find down the road apace, working their guts out to put a stop to it.

"You should have seen his eyes light up. The Injuns hadn't told him a thing. Not a damned blessed thing. They couldn't shut out the agony, so they had clammed up on him. What I mean, shut off their thoughts. It was something I could have done too, but I didn't want to try.

"Suddenly he was looking deep into my eyes. 'You'll miss the vibrations,' he said. 'It's like a strong drug when you stop taking it. The Indians have been coming back for more. It's pitiful. Wish I could do something. It will wear off when I'm gone, but meanwhile you'd better keep travelling—all to-night and to-morrow. The nearer I am to you the worse the craving will be.'

"Of course he wasn't really speaking to me. I just heard him talking deep inside my head. His eyes must have done something to me, because when I woke up I was lying on my back in the darkness and staring up at the moon. Above me and off to the left the tower glimmered. It was all lighted up now.

"I got up and started running—not away from the tower, but *toward it.* I felt I had to have more. But I guess he was still watching me from inside. Something seemed to lift me up and turn me around, and before I knew it I was stumbling up toward the road. I didn't hear your car coming. The headlights blinded me, and—"

Graham's fingers bit into the big man's shoulders. "Where is that tower now."

"He—he moves it around. But if you mean where was it when I started up here—"

"That's it."

"Down by the swamp. Just around the bend there and straight down."

Graham said: "All right. Now listen carefully, Olson. You can do one of three things. You can wait here in the car for me, you can hit the road on foot, or you can take pot luck with me when I go knocking, like Childe Harold."

"Childe—"

" 'Childe Harold to the Dark Tower came' Which will it be, Olson." He locked the car as he spoke, and put the keys in his pocket.

"I—I'll just sit right here until you get back," Olson said.

FIVE minutes later Graham was descending a pebbly embankment, a pocket flash in his hand. Scarcely a sound broke the stillness. Above him trees formed traceries through which the moonlight filtered in thin, wavering shafts. Beneath him gleamed the swamp.

There were dark patches where mud banks protruded above its noisome surface and weedy expanses where no water showed at all. But here and there were reassuring glimpses of brightness between the trees, still pools reflecting the light of far, glimmering stars.

The trees thinned as he descended and the gravel was replaced by soggy mud which sucked at his shoes and spattered up over his ankles. Twisted and flattened shrubs and a sapling bole stripped of its bark bore mute witness to the passing of something massive and swift-moving in a marshward direction.

By the time he reached level ground he was breathing harshly, and into his face had come a look such as a man might have who is contemplating breaking into a sealed vault at midnight.

There was a mist swirling up from the marsh, but so vast and luminous was the structure which reared itself in his path that nothing but a solid wall of blackness could have obscured its outlines.

From its flaring, mushroom-shaped base there ascended two enormous cylinders which merged into shadows overhead. Like the stamens of some plant-giant in a world Gargantuan were those immense, rotund columns of metal. Blue-cold and unearthly, they seemed to advance without movement on the tiny human figure below, halting him in his tracks and chilling him to the core of his being.

Near the base of that cyclopean edifice a flight of low stone steps terminated in a little square embrasure. Standing in the embrasure, his arms folded on his chest, was a familiar figure. But he was not wearing borrowed clothes now.

On his broad, flat chest was a glowing breastplate, and his limbs were encased in chain-metal and a plum-colored metal starfish had wilted on his head.

He was staring steadily down at Graham, but there was no disdain in his gaze now.

"Indians okay," he said. "Me tell Indians go back, Doc cure. Me lie, say name Olson. Name Jahanus, big wampum man."

"But you—"

"Me go now, Doc.

He nodded and raised his eyes to the vast, glowing cylinders above him. The cylinders had begun to revolve. Slowly, steadily, their luminosity deepening as they turned about in the moonlight. Suddenly as Graham watched them they spun faster.

Cold sweat came out on Graham's skin, and his teeth began to chatter. His face had the look of a child who has been frozen to immobility by some adult wonder beyond its ken.

The cylinders were flashing now with all the hues of the spectrum. Flashing, blurring, becoming spinning shafts of rain-

bow stuff which blended with the swirling mist until the figure's glowing breastplate shone like a star through a cloud.

Jerkily his arms went up and his voice came again. "You square-shooter, Doc. You try cure Indians, work hard. No fuss, just medicine guy. Me like no fuss guy. Me sorry no more see."

A sudden wavering seemed to shorten his body and almost at the same instant —he ceased to be there at all. The sky was blotted out by a vast glimmering, and where his metal-clad body had been there yawned only empty air.

With him into the vast Ocean of Time went the tower a crew that Graham had never seen and five hundred and ten grains of quinine. And with him went a little of Graham's country—a few seared marsh grasses from a swamp which reflected Aldebaran and the Pleiades and knowledge that would benefit Graham's own ancestors perhaps—in fifty thousand or so years.

Slowly the glimmering subsided and Alpha of the Centaur came back into the night sky, to wink moistly twenty-six trillion miles away.

Most of Graham's strength had left him, but he managed to pull up the collar of his coat, and get a cigarette lighted. He felt better when he had taken five or six puffs. Still shivering, he turned from the marsh, ascended the embankment and went trudging back along the road to his car.

THE END

EDITORAMBLINGS

THE appearance of this issue of *Astonishing Stories*—June 25th—will leave you just nine days in which to make up your mind to attend the Denver Science Fiction Convention. The "Denvention" is scheduled for July 4th, 5th, and 6th.

A lot of the best writers whose stories you read here and elsewhere will be at Denver for the Convention. If you go you'll meet such people as Robert A. Heinlein (in whose honor a banquet will be held), Raymond A. Palmer, F. Orlin Tremaine, Mort Weisinger, Donald A. Wollheim, Robert W. Lowndes, E. E. Smith Ph. D., Willard E. Hawkins, S. D. Gottesman, Ross Rocklynne, Charles R. Tanner, and dozens of others.

Then there will be entertainment—either a play or a motion picture, the banquet, and informal gatherings where you can renew old acquaintances and make new ones.

A letter dropped to Lew Martin, Secretary of The Denver Science Fiction Convention, at 1258 Race Street, Denver, Colorado, will get you dates, times, and places, if you plan to attend.

We'll be there. Will you?

YOU'VE noticed, by now, our new policy—the one of printing more stories than ever before, a total of ten of them in each issue. We are very interested in knowing what you think of the change. Your letters on the subject will be appreciated—and, as usual, we'll print the best of them in "Viewpoints."

Your letters on the last issue were encouraging, by the way,—not a single story went on the negative side of the ledger. And three stories were liked unanimously—not a single adverse note. The standings were: first place, "Heredity" by Isaac Asimov; second place, a tie between "Our Director" by John E. Harry and "It's a Young World!" by James MacCreigh; third place, "Beyond Doubt" by Lyle Monroe and Elma Wentz.

—THE EDITOR.

Solar Plexus

By James Blish

There was no one aboard the strange ship save a helpless prisoner, yet it flew a straight course and could fight off a cruiser. Nor was it robot-controlled. . . .

BRANT KITTINGER did not hear the alarm ringing. Indeed, it was only when a soft blow jarred his free-floating ship that he looked up in sudden awareness from the interferometer. Then the sound of the warning bell reached his consciousness, and he knew

that another ship had penetrated his meteor screens. That meant it was close.

A second dull jolt told him how close. The rasp of metal which followed, as the other ship slid along the sides of his own, drove the fog of mathematics from his brain. He dropped his pencil and stood up. Outlaws? Ridiculous— what would a pirate be doing this far beyond Pluto? An IP cruiser investigating his presence? No. All the IP men in the system knew the Science Institute's wandering little research-boats. And, while they might curse the liberties the Institute's men took with the standard course-orbits, they certainly wouldn't molest them.

He settled his glasses more firmly on his nose and bounded awkwardly down the corridor to the control room. A quick sweeping glance over the boards brought him other facts to assimilate. A strange ship making magnetic contact; obviously old-style. But big.

Too big. The only ship of that period and size was the *Astrid*. And it couldn't be that. Murray Bennett had destroyed himself and the *Astrid* both, ten years ago, to escape the consequences of his illegal robot experiments.

But who then?

Kittinger had no radio. He had used most of the parts from the one supplied by the Institute months before in setting up a makeshift Geiger counter. The photophones were useless when the other ship was so close.

He was spared further worry over communication. There was a delicate, rhythmic tapping on the hull of his own vessel. Somebody wanted to get in. Should he open, taking a chance on the stranger's being friendly? Or should he apply full power abruptly and try to tear loose? As if to spur him to a quick decision, the gentle tapping was repeated.

The dials that indicated magnetic field intensity were jammed in resolute fury against their lower pegs. The little rocket jets he used for maneuvering couldn't pull him away from such a field, and he didn't know how to operate the geotrons. A licensed astronaut of the Institute did that by radio whenever he returned to his base.

"All right," he said irritably to the tapping, and opened the outer door of the airlock. The tapping stopped. After a moment he closed it, filled the chamber with air through a valve, and opened the inner door.

There was nobody in the lock. Outside, something tapped persistently on the hull.

ABSENTLY he polished his glasses on his sleeve. If they didn't want to come in, they must want him to come out. But he had no descent space-suit, only a helmet for use in extreme emergencies— in which case it probably wouldn't have been any good anyhow, of course, being capable of supporting life for about a quarter of an hour. The Institute had not expected him to make any landings. And why should he have?

Nosey people, can't even let a man alone when he's out beyond Pluto. He clapped his glasses back on his nose. Be damned to them.

He grabbed for the inner door of the lock to slide it shut. But he stood rigid, still reaching for it vacantly, as he saw to his horror that the outer door was in motion, slowly inching open. He grabbed for a stanchion to brace himself against the rush of air into the vacuum—none came. What—?

A tube! A flexible, airtight tube. Like those used for freight transfer in space. It connected the airlock of his ship with that of the stranger. Lights at the other end of it, within an open lock, gleamed yellowly. Incandescents! It was an old ship, all right.

"Be damned to you," he repeated, and sullenly strode across the tube.

He was barely inside the intruder when

the doors rolled shut with a satisfied slam and the first bulb over his head blinked out. Then the second. Then the third, progressing down the corridor. After a moment they all went on again and the procession was repeated. This time the fourth bulb went off too. Quite obviously, he was supposed to follow the line of darkening bulbs down the corridor.

The trail led to the control-room of the vessel. It was totally empty of life.

He became aware of an oppressive lack of human noises aboard this eerie visitor. The soft hum of generators, yes; but no voices from the crew, no pad of rubber soles on metal, no chittering of communications systems. Who had operated the airlocks and steered the ship?

He glanced around the bare metal compartment, noting the apparent age of the equipment, and glumly thought: A ghost ship for true.

"All right," he suddenly barked. His voice sounded flat and unnaturally loud in the close, still confines of the room. "Stop hiding, whoever you are."

"Ah," the answer came immediately, in a quiet tone of recognition. "That sounds like Brant Kittinger."

"Certainly," he replied, jerking around to locate the source of the voice. "Who did you think it was? Come out. I've no time to play games. You spoiled my observations."

"Oh, so?" said the voice silkily. "I'm sorry. You see. I had to hear you speak before I knew who you were. I can't see you, you know."

"I *don't* know. Where are you?"

The voice laughed. "Does living alone in space make you so abrupt, Brant? It hasn't affected me that way. No, I can't see inside the ship. Only outside. Just space, space, space." The tones were edged for a moment with a repressed hysteria. "Where am I Why, right here, all around you."

Kittinger looked all around himself. "What kind of nonsense is this?" he snorted.

"You still don't see me? You're standing on me. Or rather, in me. I'm the ship."

KITTINGER'S jaw swung open by itself. He stared around him again. "Then this ship," he said as things began to add up, "must be one of Murray Bennett's robots."

"No," returned the voice softly. "This ship is Murray Bennett."

It waited expectantly. After a short silence it began again. "Don't you understand me, Brant? Don't you remember? Why were my robots illegal? The planets are swarming with robots, humanoid and otherwise, doing all kinds of work. The making of them is legal. And very lucrative. But mine—"

The shocking truth came back to Brant suddenly with full force. "My God! Human brains!"

"Yes, of course. Transplanted human brains. That brought me within the scope of the laws prohibiting experimentation with living humans. I was quite proud of myself, Brant. Nobody else ever solved the secret of transferring living brains to machinery. Nobody else ever had the surgical skill to make the hundreds and hundreds of nerve connections necessary. But I did. And after a while I was outlawed for it."

"You're mad," said Kittinger, but he knew it wasn't so. Bennett's mind hadn't been the type to crack under ridicule and threat of punishment.

The voice laughed. "You're a brave man, Brant," it hinted smoothly. Then it went on without allowing the implied threat to sink in. "You thought the *Astrid* was destroyed, didn't you. As did everyone else, since that was what I wanted them to think. Actually, I am the *Astrid* —or the *Astrid* is I. However you look

at it. My brain was transferred into it by a drugged assistant under direct telepathic control. It took a genius to do that, Brant."

"Granted," Kittinger said grudgingly. "One with loose wheels."

"But there was method, as they say, in my madness. I am a living space-ship. I'm as immune to a *dead* space-ship—an IP cruiser, for instance—as you would be to a remote-controlled robot. My reflexes are twice as fast. I feel things directly, not through instruments. And gradually I am building up my robot personnell, on a base not far from here, so that I may some day show—"

"Never mind," said Brant, shuddering and sitting down in the pilot's chair. "Don't tell me why. I can guess. Where are you getting the brains?"

"A silly question, Brant," said the ghost-ship with a hint of a chuckle. "Where did I get you?"

BRANT forced his body to relax from its sudden rigidity. He forced his reeling thoughts into coherence. "Then you think I'm going to become one of your damned machines?"

"Yes. I think you are. And a very good one you'll make, too. You've a fine mind, Brant."

"Thanks," he said drily. "What's to prevent me from stationing myself at your controls and flying you to the nearest IP station, Mr. *Astrid*-Bennett?" He could think of one reason, off-hand. But he silently hoped that Bennett would not know that he couldn't operate geotrons.

"What's to prevent me from making you cut your throat? The same thing. You're in control of your body; I'm in control of mine. My body is the *Astrid*. The controls are useless unless I actuate them. The nerves which do so are sheathed in excellent steel. The only way in which you could destroy my control would be to break something necessary to the running of the ship. That, in a sense, would kill me, as destroying your heart or lungs would kill you. But that would be pointless, for then you could no more navigate the ship than I. And if you made repairs, I would be—well, resurrected," The voice chuckled. "Also, I have certain other means." There was no attempt to veil the threat in the voice this time.

Brant made no reply, but his eyes narrowed in silent calculation as Bennett went on. "I never sleep," the voice said, "but occasionally I allow the automatic pilot to take over, to permit me to concentrate on other matters. But it is only an old Nelson autopilot, so that I must be careful. If you touch the controls while the autopilot is on it turns itself off, and I resume mastery." He seemed to wait for a comment from Brant. "Your lack of appreciation bores me," he said at last. "You are not the conversationalist I remembered you to be, Brant. Doubtless you will be less sullen in a metal body, after I make certain adjustments. In the meantime, you will please follow the lights to your quarters." And the voice ceased.

As Bennett entered the indicated cabin a disheveled figure arose from one of the two cots. He started back in alarm. The figure chuckled without humor and displayed a frayed bit of gold braid on its sleeve.

"I'm not as terrifying as I look," he said. "Lieutenant Powell of the IP scout *Iapetus,* at your service."

"Brant Kittinger, Science Institute astrophysicist. You're just the faintest bit battered, all right. Fight with Bennett?"

"Is that his name?" The IP pilot nodded glumly. "Yes. There's some whoppers of guns mounted on this old tub. Cut my little boat to pieces before I could fire a shot. Barely got out myself—though I almost wish I hadn't."

"I don't blame you. You know about

his plans for our future, I judge."

"Yes," the pilot agreed. "He takes pleasure in gloating over his achievements. They're amazing enough, God knows. I've been trying to figure a way out—"

Brant raised one hand sharply and with the other he felt in a pocket for an extra pencil. "If you've got any ideas, write 'em. I think he can hear us."

Laughter resounded about them, vibrating the walls. "Clever, Brant," Bennett's voice said. "But so futile." Then there was silence again. Powell, grim as death, scribbled on a tattered IP report card.

Doesn't matter. Can't think of a thing. Where's the Brain? "Bennett's," Brant amplified aloud.

Down below. Not a chance without a blaster. Must be eight inches of steel around it. Control nerves too.

They sat hopelessly on the cots, churning the problem. "How far is his home base from here?" Brant asked at length.

"He hasn't touched it since I've been aboard, but it can't be more than three days. He can't have any more fuel than that. I know this type of ship well enough. And from what I've seen of the generators, they haven't been altered."

"Umm," said Brant. "That checks. Astronautical engineering wasn't in his line." It was easier to ignore the presence of the listener while talking—anything else led to shattered nerves. "Three days to get out, then. Or less." For twenty minutes Brant said nothing more, and the IP pilot squirmed and watched his face hopefully. Finally the scientist picked up the pad again.

Can you pilot this job?

The pilot nodded, and scribbled: *Anything with geotrons—I'm IP. Why?*

Brant lay back on the bunk without replying, swiveled around so that his head was toward the center of the cabin, doubled up his knees, and let fly with both feet. They crashed hard against the wall, his hobnailed shoes leaving bright scars on the metal.

"What was that for?" Bennett and the IP pilot asked simultaneously. Their captor's tone was curious, but not alarmed.

Brant's thoughts boiled furiously. "Am I allowed a few questions, Bennett?" he asked.

"You can ask them."

"Well,—what did I do then?"

"Why, I can't say specifically. As I told you, I can't see inside the ship. But I get a tactual jar from the nerves of the controls, the lights, and the floors; and also a ringing sound from the Audios. That tells me that you either stamped on the floor or pounded on the wall. From the intensity of both impressions, I should say you stamped."

"You hear and you feel, eh?"

"That's right," Bennett replied in tolerant amusement. "Anything else?"

"No," said Brant. Then, very quietly, he picked up the pad again and write: *Follow me.*

HE GOT off the bunk and tip-toed down the corridor toward the control room, the pilot at his heels. Bennett was silent only for a moment.

"I can still feel you, you know," he said at length. "You needn't be so quiet. Go back to your room."

Brant walked a little faster. Could Bennett enforce his orders?

"I said, go back to your room," the voice ordered, harsh and alarmed.

Brant gritted his teeth and marched forward.

"I should hate to have to spoil good material," Bennett said in a deadly tone. *"For the last time—"*

The next instant several things happened, almost simultaneously. Brant received a powerful blow in the small of his back, which sent him sprawling. A

bare fraction of a second later there was a hiss and a flash, and the air was hot and choking with the sharp odor of ozone.

"Close," commented Powell's voice calmly. "There's heat-needles set in the walls. To control the prisoners. Crawl, and make it snappy."

With grim determination they squirmed to the control room. "He doesn't know what I'm up to," Brant said aloud, and there was a tinge of ironic humor in his voice. "Do you, Bennett?"

"If you get up off your belly I'll burn you to a cinder," the living ship snarled, in a tone almost unrecognizable with fury.

"Hmm," said Brant, automatically settling his glasses. Here was a problem. He wrote on the pad and shoved it across the floor to Powell.

How can we reach the autopilot?

"What for?" Powell asked aloud.

Tell you later. Got to smash it.

They lay on the floor. Weird situation! Just over their heads, the keystone of their release—provided Brant's hastily-formed theory was right, of course. Yet if they arose to reach it, the deadly little heat needles would blast them.

Powell pushed the pad back. On it were the words: *Throw something at it.*

"Ah," said Brant. He drew off one of his heavy shoes and looked at it critically. It would do. With a lightning-quick motion he flung it.

As Bennet grasped the meaning of the suden sensed stir of movement the heat-rays hissed in a frantic attempt to catch the flying object in mid-air. It was too late. The shoe plowed heel-foremost into the autopilot with a rending smash.

THERE was a short, bubbling scream and the Astrid gave one wild roll. Then there was silence.

"All right," said Kittinger, getting to his knees. "Try the controls, Powell."

The IP pilot rose cautiously, but there was no flash of rays. The ship responded to his skilled fingers with an instant surge of power.

"Now, how the hell did you know what to do?" he asked, baffled.

"It was simple," Brant explained complacently, putting on his shoe. He walked over to the wall and stared at the now-harmless heat-pencils imbedded. "He told me that he had connected the artificial nerves of the ship, the control nerves, to nerve-ends of his brain. And he said he'd made only hundreds of connections. . . ." His voice tapered off as he saw what he wanted on the control panel: a sharp-pointed metal rod. He seized it and commenced to dig out the heat-pencil. It came out almost immediately, intact. He sprang out of the control-room with it and ran down the corridor.

A couple of minutes later he returned more leisurely to the sputtering Powell. "I've cut all the connections I could find to the brain. Even if he does come to, I don't think he can do anything now," he explained, flinging down the heat-pencil. "I was saying?

"Oh, yes. Well, if he had separated the pain nerves from the control nerves, he would have had to make thousands of connections, not hundreds. I didn't think he could have done that, especially working telephathically through a proxy. He had just made general connections, and let his brain sort out the impulses as they came in, as any human brain could do automatically under like circumstances. When I kicked the wall I wanted to make sure he could feel the jar because, if so, he hadn't separated out the sensory nerves. Which, in turn, meant that pain axons were bound to be present."

"But how—"

"So when I smashed the autopilot, it was like ramming a fist into a man's stomach. It hurt. He fainted."

THE END

RADIATION TRAP

Toroga, planet of Sirius, was a crude, new world—and a man who was strong and able could make it over on a better pattern!

By Harry Walton

CHAPTER ONE

First Berth

SIRIUS was sinking in the west, an enormous lemon-colored globe as seen through the thick air of Toroga, when Blane guided his rented "cat" through the stockade gate of the Roarke mining concession. Through slow-settling clouds of red dust stirred by the treads of his machine he made out low sheet-metal buildings, a gabled shaft head housing, the plain, windowless bulk of an electronic ore reduction plant. Because he was young, the scene of his first labors brought a lump to his throat; it wasn't every analytical geologist who got a berth like this fresh out of tech. Even the slow sense of disappointment that stole over him at closer sight of the buildings, into which corrosion had struck its green fangs deeply, could not shake his belief in his good fortune. That the place was neglected meant only that it was understaffed —that there was work here for him to do, a chance to pitch in and prove himself. Probably there were bigger opportunities here than in the chromium-plated jobs some fellows picked up at home, on Jupiter or Saturn, where everything had been running on schedule for fifty years and all you were expected to do was fit yourself to a well-worn groove.

Toroga was different, primitive, as far beyond System law and System orthodoxy as it was beyond the System itself. Even in a geodesic-warp freighter the trip had taken Blane nine months. This was a new, crude world, where a man might still make discoveries, where everything wasn't mapped and card-indexed. What if your bunk wasn't air-conditioned?

The cat's treads crunched obediently to a stop outside the administration building, evidenced by a rusty name plate that hung aslant from a single screw. But even as Blane shoved back the folding windshield there came the heavy clump of boots on a metal floor. Simultaneously appeared the most hideous creature he had ever seen.

Blane was familiar enough by now with the native race—the Quitchies, as they were familiarly called—harmless, indolent two-legged creatures that were scarcely half human and rarely above the cretin rank of mentality. Without doubt this was a Quitchy, but his hairless, nude body was blotched with huge sores such as Blane had never seen on another native. The creature's single eye bulged grotesquely, and from its socket issued a thin trickle of purple blood. Shapeless, swollen lips hung agape, and Blane saw with a shudder that the roots of the teeth were laid bare where flesh and gums had been sloughed away as by a careless scalpel. One arm, wasted to the bone at the elbow, was elsewhere a mere mass of suppurating flesh. Disgust vied with pity to make Blane turn away. But the Quitchy came no closer he stood regarding Blane with a stupid, unwinking stare.

Something hurtled through the air, struck the native squarely on the chest. He uttered a shrill, womanish cry of pain, and limped off, hunched over, his head buried in his arms as though in fear of further missiles. Blane's eyes went to the object, a huge chunk of wood to which adhered a fragment of bloody skin.

"Sorry that damned chap bothered you," said a booming, hearty voice. "He's been warned away twenty times, if once. You're Blane, of course? Come in and have a drink."

BLANE looked at the speaker, who had evidently come from inside the shack. A grossly fat man, but with a ruthless energy evident in the bearing of his overfed body. The heavy-jowled face was greasy with sweat. Small black eyes surveyed Blane with contemptuous good nature and somehow conveyed to him the impression that the other's scrutiny had left him unclean. Nevertheless he grasped the enormous, moist hand the man thrust out, and followed him into the shack.

The bat man introduced himself.

"I'm Jim Roarke. The only other man around here is Dave Faulkner, my superintendent. Been together for years but he's getting old now. That's why you're here. I believe in giving young fellows a chance. A young buck like you won't

have no trouble getting along with me. Here's to luck!"

Blane nodded, drank down the raw fermented liquor he had been given. He found Roarke's friendliness offensive, and silently cursed himself for a thin-skinned fool.

"The fact is," Roarke went on, refilling the glasses, "Faulkner isn't the man he was—as a geologist, I mean. Of course you can't keep up with things in a forsaken hole like this. But what we need is new blood."

Blane toyed with his glass. "Just what is the trouble with the mine?"

"Trouble?" The big man frowned. "We can't get any more ore—nothing but low grade stuff. Faulkner can't find any new veins. That's your job."

"I wasn't told there was a geologist on the spot already," Blane said. "If there's mirzonite ore below, he ought to be able to find it."

"Faulkner's getting old, I tell you. Besides, he's so taken up with those damned pets of his—here he comes now." Roarke raised his voice to a bellow. "Dave! Come meet the new man."

There was no reply, but a few seconds later a man entered the shack from the adjoining bunkhouse. In violent contrast to Roarke, he was thin, almost emaciated in appearance. Bloodless skin hung loosely upon a gaunt frame. The eyes were deep-set and almost hidden beneath the overhang of the brow. The hands were wrinkled and gnarled as though with heavy labor. There were blue half-moons on the finger nails that awakened in Blane a vague, unpleasant sense of familiarity. The other seemed to sense this, for he hastily put one hand into the pocket of the brown jumper he wore and clenched the other so that the nails were hidden.

"This is Blane, the new geologist," Roarke said. "Come to help us out of our troubles, Dave. That'll give you more time to spend with those damn Quitchies of yours—"

Fire blazed in the small man's sunken eyes—only for an instant, but Blane saw it both glow and subside, as though a veil had been drawn over smouldering depths.

"Which reminds me," he put in hastily, "whatever was wrong with the one I met outside? A ghastly show—of course I don't know much about these natives—"

"And you aren't missing much," Roarke finished. "They're a lazy, worthless bunch of beggars—we use them to load the ore cars below because they're immune to the radiations, and there isn't enough high grade ore to pay for machine loading. But you won't have to bother with them. Just leave them to Dave and me."

"Blane asked what was wrong with Tulag," Faulkner put in drily. "Why don't you tell him, Jim?"

"Huh? Oh, Tulag? Hell, Blane, you know what natives are. No sense, no sanitary habits, no idea how to care for themselves. The fellow you saw has a native form of leprosy—nothing contagious so far as we are concerned. He's been forbidden the stockade and I want him kept out. That's all."

In the last words Blane sensed a warning that Roarke did not wish to pursue the matter further—a warning to Faulkner even more than to himself. Nor was he unwilling to forget the repulsive picture of the diseased Quitchy.

"Perhaps I'd better unload my stuff," he said. "Then I'd like to study the plans of your workings before I actually go down—"

"There ain't no hurry," boomed Roarke in that hearty voice of his. "Make yourself comfortable first, while I rustle dinner. I do all the cooking around here—if there's one thing I want it's good food. I'm no slave driver, Blane. Work in your own way and I won't

bother you. Results are all that count with me."

CHAPTER TWO

In the Mine

IT WAS four days before Blane felt ready for a descent into the mine. During that time he had checked the dog-eared water stained maps used by Faulkner and some unknown predecessor, and formed a tentative opinion as to where new veins might be opened. Roarke, he learned, had little practical knowledge of the mine. Faulkner, on the other hand, volunteered no information that was not discouraging. The mine, he told Blane, had been operating at a loss for more than a year. There was no sign of new ore below, nor even of a promising "face" of ore-bearing rock. He had advised Roarke to surrender the concession.

Of all this Roarke gave no hint. But Blane found evidence that the relations between the two men were at least curious. Roarke, who cooked for all, kept the food supplies in a locked and windowless kitchen. He slept behind a locked door, and was habitually armed with a neutron blaster—the only weapon, Faulkner said, on the premises.

But if he could not understand Roarke, Blane told himself, he could at least try to do what he had been sent out to do. He assembled his instruments—sub-electroscope, Geiger detector, powered rock drill and a handful of mini-charges, and announced that he was ready to go down, thinking that Roarke might wish to accompany him on the first descent.

"Dave will show you through the mine," the big man told him. "He's below, but you can phone him from the shaft house." He hesitated, as though feeling for words. "Guess I better tell you, Blane, that it won't do you no good to listen to Faulkner too much. He's lost his grip on things here. And he's got some crazy ideas about the Quitchies—it'll be best if you don't get him talking. He's naturally bound to resent you a bit, of course. Just follow your own ideas and report to me."

Blane nodded. It was plain enough that the superintendent was unfriendly to his purpose, if not to himself. He would, as Roarke suggested, keep his own counsel.

In the shaft house he donned the heavy metal armor without which it would have been suicide to go below. Mirzonite radiations were deadly, resulting first in superficial burns, eventually in a slow, inexorable disintegration of living tissue. Brief exposure was harmless, but cumulative in effect. Blane had heard of men trapped in pockets of high radiation intensity who had been forced to leave the mines forever because an hour's additional exposure would carry them beyond the danger point. But by wearing armor and avoiding rich pockets—in which the Roarke mine was woefully lacking from all reports—a man might put in a lifetime underground without ill effects.

Quitchies, being natives of this world so rich in radio-active minerals, and having a body chemistry radically different from that of Earth races, possessed an immunity to radiations which had been traced to a glandular substance or hormone secreted by their bodies. Attempts to inject this substance into the human system had failed, as it seemed to promptly lose its efficacy when so transferred. Quitchies were therefore permitted to work as loaders in the mines, the law of Toroga providing that they be paid in native foodstuffs. Because they were indifferent workers, many operators preferred to install automatic loading machinery, requiring only occasional attention on the part of armored operators.

ARMORED, but carrying his heavy helmet under one arm, Blane stepped aboard the shaft cage and was whisked downward at a rate that threatened to make his stomach misbehave. The six thousand foot drop was made in darkness relieved only by the feeble glow of the cage lamp. At the bottom Faulkner was waiting, completely armored. Blane put on his helmet.

Made of heavy gauge metal, this headpiece was equipped with mirrors which reflected light from outside around a number of baffle plates. These blocked radiation but left the helmet open to the air. The wearer could see clearly, although within a limited angle of vision, and could both breathe and speak naturally.

At a gesture from Faulkner, Blane followed him to a narrow-gauge rail car. An electric engine hauled them through a fourth of a mile of main tunnel, to a cross cut where half a dozen Quitchies were at work loading the squat ore cars. Faulkner brought the engine to a stop.

"Rails aren't electrified beyond this," he said. "The loaders used to push the cars this far, then I made them up into a train and hauled them by engine to the shaft. But that's all over—there's no ore left back there. You can see for yourself what they're taking out here."

A glance told Blane that the superintendent was telling the truth when he said the mine was losing money. From the stuff being loaded Roarke would get far more rock than metal. It was scarcely worth putting through the reduction plant.

From his equipment Blane selected a lamp and the sub-electroscope, stowing the Geiger detector, drill and other articles in a small rocky niche, out of reach of the Quitchies' shovels. With a composite map he had drawn he set out for several likely locations farther along the main tunnel. Faulkner and the engine had meanwhile disappeared with a string of loaded cars.

There was not sufficient ionization to discharge the subelectroscope completely anywhere along the tunnel. A man could work here even without armor. But he couldn't earn his keep mining mirzonite. There was none.

The lamp revealed quartz and the sharp, incredibly hard native silicate. Rails were rusty from disuse and the constant drip of water from the tunnel roof. The floor occasionally turned to soggy red clay underfoot.

An hour's tramp brought the end of the tunnel into sight but no promise of ore. Of course the 'scope test was not conclusive; a heavy facing of rock might absorb radiations from a mirzonite deposit behind, and only the Geiger detector would in that case reveal the few stray quanta of energy escaping, and then only if directly in their path. For a quick survey the 'scope was the better, but its results were entirely negative and Blane found himself inclined to agree with Faulkner so far as this part of the mine was concerned. Nevertheless he chipped off a few specimens for later study.

Returning to the spot where the Quitchies had been loading, he found it deserted. His watch showed it to be past sunset—an hour when the natives invariably quit work to seek the questionable comfort of their tree huts. The electric engine was not in evidence; apparently Faulkner had quit the mine with the others.

Here the 'scope promptly indicated ionization, just about what was to be expected from the presence of low grade ore. Blane took a dozen careful readings, then walked back into the cut to the niche where he had left his equipment.

AN ASTONISHED, bitter oath escaped him. In the beam of his lamp lay the ruins of his Geiger detector. The

case was smashed beyond repair; glass fragments of tubes, batteries and wires protruded from it. He dropped to his knees, setting the 'scope down in order to have both hands free to salvage what they could.

No casual accident, this. The dented metal was marked with sharp, bright scratches. A shovel could have made them —a shovel wielded by a Quitchy—or, the thought struck sharply, by Faulkner himself. It was hopeless to think of repairing the instrument. Blane gathered up the pieces, threw them into his equipment pouch, and reached for the 'scope.

In the circle of his lamp beam the needle of the instrument stood out as sharply as black against white. It lay over against the pin, and upon the ionization scale below figures appeared—incredible figures

With trembling fingers he reset the 'scope. The needle dropped with amazing rapidity.

Then, moving it a foot to one side, he again charged its plates.

For five seconds the needle remained poised. Slowly then it dropped back to a reading no higher than he had obtained before. He moved the 'scope back to its original position. Again the needle dropped swiftly. The ore giving rise to ionization was evidently heavily overlaid with absorptive material, some small fault in which allowed a narrow, tell-tale "beam" of radiation to escape.

Hastily he removed his equipment to a place of safety, and set to work drilling charge holes in the rock face. Twice the bit of the battery-powered drill brought forth metallic shavings when he withdrew it. Into half a dozen holes he inserted mini-charges, then plugged in the firing cord and unwound twenty yards of it as he retreated to a place of safety. The explosion hurled billowing dust clouds as far as the main tunnel. Only with an effort did he restrain his impatience sufficiently to allow the air to clear before venturing back.

The entire face had caved in. Mixed with the debris of exploded rock that he savagely cast aside with one of the shovels left by the workers were shards of metal, some large enough to betray their origin.

They were parts of anti-radiation suits, They had been hammered roughly flat and built into a shield, two or three plates deep, the whole skilfully faced with natural rock.

At last the opening was big enough to squeeze through in his armor. The torch revealed a short, cramped tunnel, which opened unexpectedly ten feet from the blasted wall into an irregular natural cavern or pocket of uncertain size. Upon the wrists of Blane's armor fluorescent bands glowed bright blue—warning that his suit would not protect him against the powerful radiation here present, and proof positive that the cavern was fabulously rich in mirzonite.

CHAPTER THREE

The Mother Lode

"THERE'S your ore," Blane told Roarke half an hour later, throwing two jagged lumps down so that they rang hollowly upon the metal tabletop. "Don't touch it without gloves. If you have a Geiger try it. But I can tell you that it'll assay over a hundred units per ton."

Roarke's tiny eyes fastened hungrily upon the rock, then darted to Blane. Abruptly the big man left the room. Blane could hear him throwing articles about in the adjoining storeroom. In a minute he returned, carrying an old and obsolete detector.

For all their grossness his fingers knew their work; the tubes glowed dully and when Blane put one of the specimens in

front of the target a blurred rattle of sound came forth.

Suddenly Roarke laughed, a full-deep-throated bellow of triumph. He went to the doorway and thrust his head out. The laughter ceased as suddenly as it had begun.

"Dave!" he roared. "Come look at this!"

He turned back to Blane, his lips still quirking with laughter, but in his eyes a malignant, unnatural triumph. There was no answer from outside. He stared hard at Blane, and lumbered from the room, shouting again for Faulkner. Blane stood where he was. A minute dragged by. He sat down to wait, then got up again. The Geiger rattled on. With a curse he reached out and shut it off.

Suddenly Roarke was back. Faulkner entered just behind him, paler than ever, and with both hands out of his pockets for once, their unpleasant blue half-moons plainly visible. Roarke switched on the detector. Its minute, significant roar filled the room. Faulkner's sunken eyes met Blane's, then went angrily back to Roarke.

"What about it?" he asked.

"It's your ore, Dave," sneered Roarke. "The ore you couldn't find—or couldn't you?"

"I suppose you know a piece like this means nothing," said Faulkner quietly. "I can find you some like this, but it isn't paying ore because there isn't enough of it."

Blane found his voice. "There's a lode down there four feet thick and it's all like this."

"A salting maybe," Faulkner said. "But not a lode—I've been fooled too often not to know."

"I'm not mistaken. There is a lode—I took time to make sure of that before I got out. We'll need double armor to make any real survey."

"You'll find no double armor here," sneered Faulkner. "And no need for it in a petered-out claim."

Roarke's fist smashed down on the table. "You're lying—one of you is lying. I want the truth, damn you!"

Faulkner shrugged. "There's one way to find out, Jim. Go down and see for yourself."

The big man's truculence vanished. He looked from one to the other of them. A trickle of sweat broke out on one temple.

"You're not afraid, Jim?" asked Faulkner softly. "Not afraid—when there may be millions down there? Not that there are—"

"I don't believe you," gasped Roarke. "Blane, you're in charge. Put a gang of Quitchies on that vein or lode or whatever it is. I'll watch what you bring up—"

"The Quitchies won't work for Blane," interrupted Faulkner. "He doesn't talk their language. They'd work for you, Jim—*if you went down with them.*"

"Dave, I order you to put them to work wherever Blane says. If there is a new vein—"

"I can't make them bring up what isn't there," snapped Faulkner, "no matter what Blane says. He's young and he's made a natural mistake, but the Roarke mine is worked out. You'll get nothing but what you've been getting."

Blane walked to the door. "I'm young, Mr. Faulkner, but I'm neither a fool nor a liar. My report stands. If you care to see for yourself I'm ready at any time to show you the lode."

"Blane—wait. Faulkner's right—we have no double armor here—never needed it."

"You do now," returned Blane curtly. "But an ordinary suit will do for a short inspection. I'll meet you at the shaft head, if you like, in thirty minutes."

Roarke nodded, a sickly white beneath the tan of his fleshy face. With unnecessary but satisfying violence Blane slammed the door behind him.

TOROGA'S moons were out, one a thick crescent, the other a broad orange disc, hurtling at such a speed across the heavens that Blane could follow their movement with unaided eyes. In two hours the farther one would set, only to rise again before morning and continue its fast flight around the planet. Double moonlight cast weird, staggered shadows of the machine house, the timbers of the cage shed, and a malformed native tree that grew inside the stockade.

"That you, Blane?"

It was Roarke, his huge body magnified by a trick of the moonlight. Sweat glistened on his bulging forehead, and on his face, curiously pallid in the ruddy light, was stamped something closely akin to terror. Blane answered, to his obvious relief.

"I'm late—couldn't find Dave anywhere. We'll go down alone," said Roarke nervously, fingering the blaster at his belt.

Blane helped him into a suit. The cage was up. They stepped on the car and were whisked down.

"Hello," said Blane, as they grounded. "I thought the rail engine was here. We'll have to walk."

Roarke made no answer. He had put on his helmet above ground, and Blane now donned his also. They set off down the tunnel, lamp beams glinting upon steel rails, boring shafts of brilliance into the darkness ahead. The ancient Geiger detector whipped against Roarke's armored legs as he walked. Blane did not offer to carry it.

"Much farther?" asked Roarke after they had walked some time. He was evidently trying to speak quietly, but the rock walls took his voice, shuttled it back and forth, magnified it.

"Almost there," Blane took the lead, quickened his step without looking back. A vague, formless fear urged him on. But the cut where the Quitchies had been working was as he had left it. The opening he had blasted yawned just ahead. Behind him he heard Roarke's footsteps falter.

Blane entered the tunnel, emerged in the cavern. The beam of Roarke's lamp followed haltingly, then Roarke himself. He stood unmoving as Blane reached down and switched on the Geiger. A staccato blur of sound filled the cavern. Upon the arms of both men fluorescent warning stripes blazed with cold brilliance.

Blane stabbed out with the beam of his torch. "The lode is visible from this point and runs—"

A crash of footsteps whirled him around, and Roarke also. In the passageway loomed an armored figure. It entered the cavern, trailing a double-corded detonator wire, the two bared ends carefully separated and held aloft in one metal-gloved hand.

"You're late, Jim. But it's a triumph for sheer nerve that you came at all, isn't it? Or for greed, perhaps—" It was Faulkner's voice, but with a tone of mockery Blane had not heard before. "No, don't jump me! I might touch these together—"

THE other mailed hand came up, poised above the bare copper strands. From Roarke's helmet came a low whimper of sound.

"You can guess, eh, Jim? But I'd better tell Blane that I've got the tunnel charged. The explosion will jam it solidly. So don't move, either of you."

"What's this all about? What are you trying to do?" asked Blane.

"Awaken memories," replied Faulkner. "Strictly between Jim and me. It wouldn't have been necessary if you hadn't found the lode again. How you did it with only a 'scope I don't know—I smashed your Geiger, and I had the ore pretty well shielded. But you did and

now we have to have a reckoning, Jim and I."

"The—the mother lode!" said Roarke. "You never mined it at all."

"I never touched it. You're rich, Jim—richer than we dreamt when we first saw this place. The lode runs twenty feet back. Millions, Jim—if you live to get them out."

Blane moved toward the speaker. Faulkner retreated a step, the bare strands of wire scarcely an inch from his glove.

"Don't touch me! You're not in this, Blane—I'll give you a chance. Get out quick!"

"We're all going out together," said Blane quietly.

"Get out," repeated Faulkner hoarsely. "For your life, get out—now!"

Blane did not move. "We're all getting out. No matter what there is between you and Roarke, you can't mean this, Faulkner—"

A thud from the passageway interrupted him—and another, and another, slow, deliberate, louder in their fateful significance than the racking crash of thunder — the unmistakable, sinister about-to-fire signal of a timed detonator. Nine warning thuds. Ten. Twelve—

The explosion buffeted them with gaseous fists, hammered at their ear drums with a thousand echoing thunders. Blane found himself sprawled on the floor, his lips salty with the taste of blood. He got his arms under him, lifted his armor-clad weight. Except for nosebleed due to concussion he seemed unharmed. Through swirling dust he could make out the motionless figure of Faulkner, spreadeagled against a wall by the blast. Roarke was also struggling to his feet.

The eyes of all three turned to the passageway. Rubble filled it solidly from floor to ceiling. Sand and rock spilled into the cavern, creepingly alive with the trickling of still more from above.

"You should have—hurried," whispered Faulkner. Deliberately he twisted together the bare wires he held, and threw them aside. "Bluff—the charge was set before I came. I only wanted to hold Jim here until it went off. Sorry, Blane."

He walked over to Roarke, who stood as though stunned. "Remember that other cave-in, Jim, that trapped us right here six years ago? Remember how we tried to clear the tunnel, with only one shovel between us, first I, then you?"

The other made no answer.

"You haven't forgotten, Jim?" The note of mockery was back in Faulkner's voice. "Hour after hour we worked like men damned, sick from ore burns and bad air, digging with bloody fingers at last. We both worked, until I dropped. You were stronger. You worked on alone. You finished what I had given my last ounce of strength to accomplish. And when the way was clear *you got out and left me, Jim!*"

"Because I was half crazy," muttered Roarke. "But you got out by yourself. The fresh air brought you to and you crawled out."

"But that was later, Jim. You don't know how much later, or how much longer than you I was exposed, do you. You'd taken the engine to the shaft, and I had to crawl all the way, weak as I was, with every inch of my skin raw with ore burn. I got to the surface three hours after you did—oh, I must have fainted on the way more than once. But you didn't come back down to see whether I was alive or dead. From that day to this you haven't been down, because you know what mirzonite does to a man. You knew the radiation had marked us for life, that absorption is cumulative, and that a certain amount of further exposure would give you radiation poisoning. You never would risk that—until now. Even now you don't know how much more exposure you can safely stand. Didn't

you wonder why I stayed on? I let you think the danger didn't bother me, but I didn't tell you *why* it didn't. Look!"

FAULKNER drew off his heavy gloves, took a small knife from his equipment pouch, and deliberately cut a small incision across the ball of his thumb. Blood seeped up, formed a rounded little drop.

"Turn off the lamps," said Faulkner, "and look, Jim. This is why I stayed on, why I wasn't afraid—"

In darkness relieved only by the glow of fluorescent sleeve stripes, the droplet of blood shone with a virescent light of its own, no longer scarlet, but a ghastly yellow-green. Against the blackness too Faulkner's hands were marked by the dull glow of those same half-moons Blane had noticed before; it came to him suddenly why they had seemed offensively familiar, and where he had seen their like before—upon the scabrous paws of the diseased Quitchy, Tulag.

"The sign of radiation poisoning, Jim," Faulkner said. "I'd caught it before I could crawl out—*because you left me there*—

"I knew there was no cure, but that it would take years to kill me. I swore that I would remain strong enough to work, and I never told you—I even went on wearing armor, although I would have been as well off without it. I wore armor because I didn't want you to guess, Jim. I wanted to stay with you, hoping that some day you would know how I felt—that you would some day see your blood glow green in the dark—"

"No!" whispered Roarke. "No, you wouldn't—"

Blane switched his lamp on. "That's enough, Faulkner. It won't help you if we all die. I'm going to find a way out."

His lamp beam searched the far end of the cavern, the only part he had not yet explored. The wall here shelved away at a height of five feet forming a ledge of uncertain depth. He thrust the beam of light far back, waking ancient shadows, striking reflected fires from quartz and crystal. An exclamation burst from him as he saw what appeared to be a small opening, scarcely two feet in diameter, in the farther wall.

"There's a hole here, blind or not I don't know. Have to climb up to find out—"

"I can save you that trouble," Faulkner put in. "It's an open passage leading to an unused cut one level above the main bore, from which it is easy to reach the shaft. But you wouldn't want to leave that way."

"Why not?" snarled Roarke, evidently emboldened by the discovery.

"Because the hole is too small. You couldn't get your shoulders into it—unless you take off your armor. But I wouldn't, if I were you. Even Blane, who hasn't been exposed much as yet, couldn't survive more than thirty seconds of this radiation without becoming—what I am. As for you—five seconds would be fatal. No, there's only one of us who can afford to escape that way. Mirzonite can't effect me any further, you know. But you missed the main thing, Blane. Look six feet to the right."

Blane shifted his beam as directed, to find what he had overlooked in the excitement of the first discovery—a square metal plate three feet across, apparently set into solid rock.

"Boost me up, Blane," ordered Roarke in something of his old voice. "I'll look it over."

CHAPTER FOUR

Escape—Without Armor!

BLANE stooped, allowing the other to step on his back and mount to the ledge. In utter silence Roarke ex-

amined the plate. Despite the concealing bulk of armor Blane could almost see his great shoulders sag.

"Quite solid, isn't it, Jim?" asked Faulkner. "Half inch stellite set into solid concrete sills. Behind it there's a tunnel—all my work, Jim, planned six years ago and built to allow you to escape when it pleased me. I didn't want you to die, but to live, knowing as I knew that the seed of death was sown in you—feeling the growth of it and your own helplessness. It wasn't a punishment of hours that I planned, Jim, but one of years.

"But when the work was done, the plans perfect, I found my hatred had burned itself out. In plotting your punishment I had glutted my desire for it. Strange, wasn't it? It might have saved you, Jim, if you hadn't given me new reason to hate you. The Quitchies—"

Roarke spoke in little more than a raw whisper. "I'll make it up. To you—to them. Get me out of here, Dave."

Faulkner turned to Blane. "I suppose every man wants to justify his acts. I want you to understand, Blane. The native you saw was suffering from an acute form of mirzonite poisoning. I've seen dozens of Quitchies stagger from this mine with their skin dropping off, their eyes bleeding. Jim killed three who wouldn't keep away after they caught the sickness, because it would have given his game away if a native welfare inspector had seen them. But while they look sound he's willing to let them kill themselves making him rich—"

"But it's a proven fact that the natives are immune to mirzonite," Blane interrupted. "Tests have proved it—"

"*Normal* Quitchies are," Faulkner put in, with acerbity. "There wouldn't be any Tulags if Jim used normal ones, and paid them out in food, and let them live out their miserable lives as God meant them to. But he found they wouldn't work steadily for food, because they have the forests to feed on. He pays them in *salt*." Faulkner grinned bitterly.

"DID you ever see a Quitchy eat salt? They're stark crazy for it. They'll kill themselves with work to get it when nothing else will make them stir a finger. A Quitchy would sell his soul for salt—if he had one. There's no free salt on Toroga or in a Quitchy's body unless you put it there. And salt kills them—because it destroys the hormone that make them immune to mirzonite. That's why the stuff won't work in us, or in any metabolism that includes salt. And a salt-eating Quitchy absorbs radiation faster than a human—in six months they look like Tulag. In seven they're dead. But they don't know it's the salt that kills them—and it wouldn't matter if they did.

"Nor did I know at first. Then I noticed their finger nails and compared them with mine. I got myself a control—a Quitchy who worked with the others, but whom I paid off myself, in food instead of salt. He's still healthy. But every other native who was working here when he came is either dead or dying.

"I told you what I'd learned, Jim. You laughed, and told me to put armor on my damned pets if I cared that much. Armor! When a Quitchy goes crazy if you hang so much as a rag on him! But I tried it. They ripped the armor off and went back to work without it. I thought of reporting the thing, then realized it was my word against yours. I had no evidence. We use tons of salt in the reduction plant; what you gave the Quitchies would never be missed or traced. Nor would any ever be found on them—they eat it immediately. You would have found somebody else to run the mine, and the Quitchies would have died off quicker than ever. Because I was doing what little I could to spare them.

This pocket, the mother lode, that I had first left untouched as part of my plan for your punishment, I later sealed up to save the Quitchies from exposure to its radiations. Also I hoped to keep any new surveyor from locating it. The rest of the mine petered out. For a while that looked like the answer to things—but Blane found the lode."

The blurred roar of the Geiger filled the silence that followed Faulkner's words. Three expressionless masks of metal stared at one another, then as though by consent at the fiercely glowing sleeve stripes that shrieked mute warning.

"What do you want?" whispered Roarke hoarsely. "Name it quick. We've got to get out of here—" His breath came whistling through the helmet-plates.

"You're worried, Jim, aren't you?" retorted Faulkner calmly. "You know that every minute drags you closer to the deadline, when your blood will begin to reradiate what it can no longer absorb. Then the sickness. I've had it six years, but I've had the sight of you as you are now, Jim, to help me stand the pain and the certainty of—death. You'll have only yourself to think of, and the memory of millions that will never do you any good—"

"Stop it!" snapped Blane. "If you have an offer to make, make it."

"Sorry, Blane. I keep forgetting you're in this now. But it's Jim who will have to pay my price. Life for the Quitchies, born and unborn, Jim—a guarantee on my own terms."

"What are they?"

Faulkner drew from his pouch a closely printed sheet of paper, and a second, typewritten one. "First, you'll sign a release of your concession here, Jim, turning it back to the government as the law provides you may. Second, you'll sign this confession stating that you have paid the natives in salt instead of legal foodstuffs. I'll hold it, as a guarantee that you won't contest the other. When the new operators see this lode they won't waste any time before putting in automatic loaders. No more Quitchies, Jim—"

"You're robbing me," whimpered Roarke. "But I'll sign—only get me out first."

"Sign now, Jim," said Faulkner coldly. "Or stay here—and rot."

THE helmeted head of Roarke turned uncertainly from the Superintendent to Blane. Then, frantically, the big man ripped off one glove, seized the pen Faulkner held up, and hastily scrawled his signature upon both sheets. Quick as he was, the angry flush of an ore-burn crept over his unprotected hand before he could again don the glove.

"How do we know you'll get us out?" muttered Roarke, as Faulkner took the papers.

"You don't," returned the other. "But I will." Without further words he twisted his helmet free, then rapidly doffed the other parts of his armor, until he stood clothed only in shirt and jumper. No sign of ore-burn appeared upon his naked forearms, for, ironically enough, mirzonite poisoning rendered its victim immune to further radiation.

He scrambled up on the ledge, and a moment later vanished into the narrow mouth of the open tunnel. Roarke's breathing was a harsh, rasping sound. In Blane's ears the thudding of his own heart sounded like that of a trapped animal. His nerves were wire-taut.

Two minutes passed, and three. The sinister roar of the Geiger filled the stillness, until Roarke with a sobbed curse asked Blane to shut it off. He did so, then set himself to counting stones in one wall. But not that childish expedient nor an effort to blank his mind utterly could quell the chaos of his thoughts. What if Faulkner were mad enough to desert them?

"He's gone!" snarled Roarke suddenly. "Don't you see? With my release filed, he can claim this deposit himself. He never meant us to leave here alive—"

The thought had struck Blane also. He replied with an assurance more intuitive than reasonable. "I think he'll free us—if he can."

"What do you mean?"

"Faulkner's sick, sicker than he knows, maybe. Radiation sickness often attacks the heart. He may have collapsed—but it's a bit early to think of the worst yet, isn't it?"

"He lied, I tell you," snarled Roarke. "We'll rot here unless we blast our way out."

"With what?" asked Blane wearily. "We've no charges, no drill to set them with—and if we had, a blast might wreck the tunnel and leave us worse off than before."

"We've got this!" muttered Roarke, pulling the neutron blaster from the pocket of his suit. "I'm going to use it!"

Before Blane could stop him he leveled the weapon and fired, squarely at the metal barrier. A pencil-sized hole appeared as if by magic in one corner of the stellite plate. Roarke aimed again, but Blane, whose ears had caught an un-

mistakable metallic scraping, leaped up and struck the weapon aside even as its guard ring glowed with its discharge. Fragments of rock leaped and fell at the impact of its beam.

CHAPTER FIVE

"Seize Him—And Kill!"

"LISTEN!" snapped Blane. "Faulkner's working back there—you might have killed him. You couldn't cut away the plate anyway, with the ten shots your batteries are good for."

Roarke snarled an inarticulate reply, but let the blaster fall to his side as the sounds increased in volume. Bolts thudded back. There was a grating of rusted metal, and slowly the plate swung inward, revealing Faulkner, breathless and trembling from his exertions.

At once Roarke leaped forward, hurling the smaller man aside in his mad dash for the tunnel. Blane, following, paused as he saw that Faulkner was near collapse.

"Here! We've got to get you to bed. Think you can make it to the cross cut?"

Faulkner smiled wearily. "Get out yourself, Blane. I guess—I can crawl that far. Been running—too much for me."

His lips twisted into a grimace of pain. Blane hesitated, saw that the cramped dimensions of the tunnel made it impossible for him to help Faulkner through it, and entered it himself. His lamp showed it to be fifteen feet long or more. He emerged into the abandoned cut Faulkner had described. There was no sign of Roarke.

It was a full minute before Faulkner painfully crawled out and rose shakily to his feet. Blane put an arm under his shoulders. With Faulkner clinging to him, he flashed the lamp about in seach of the shaftway leading to the main tunnel. The beam found it—and found also the armored figure of Roarke standing beside it, blaster leveled.

"Forgot I had this, didn't you, Dave?" snarled the big man. "Thought you could rob me without a fight? Stop where you are. Blane, search him. I want those papers back."

For all the fact that the robot-like face of his helmet concealed Roarke's expression, Blane felt the ruthless, decisive energy behind the big man's words. Roarke would fire as readily as not, if defied. Blane shrugged, went through Faulkner's pockets, tossing their contents at Roarke's feet—a few inches of firing cord, connection clips, a knife, the stub of a pencil.

"That's all. No papers on him."

"He's hidden them! Give them up, Dave, or you'll never get out of here alive."

Faulkner's pallor-ridden face lighted with a thin smile. "I was afraid you'd feel like that, Jim. That's why I had to keep you waiting in there—while I rode the engine to the shaft and sent those papers off to Administration City by Quitchy runner. He'll take them to a friend of mine, and if that friend doesn't hear from me within forty-eight hours, he will turn them over to the Adminstration. You're licked, Jim."

Roarke cursed him furiously, then, abruptly: "Maybe I'm not licked at that, Dave. Not yet—" Blane could imagine the cold smile on the big man's face as he went on, jerking the blaster up briefly. "This is my ace in the hole—this and the cat Blane drove over in. By driving like hell I can cut off your damned Quitchy, Dave—out in the sticks where a dead native won't mean a thing. Your friend will never see those papers—"

FAULKNER strained against Blane's arms, his deep-sunk eyes ablaze. "I've got a witness now, Jim. Blane heard you

admit everything. He won't perjure himself for your sake. Our story will convict you even without your confession."

"I know it," Roarke replied. "And I'm not taking any chances that way. Too bad, Blane—you could have gone far with me. I'll have to report you both killed by a premature blast. That won't surprise anybody, or raise awkward questions. These mines are dangerous if you're even a bit careless—and you *were* careless."

"That's murder, Roarke!" said Blane, fighting to keep his voice steady.

Roarke shrugged. "Between ourselves, so it is. But who'll guess it? Why should the owner of this bonanza kill his superintendent and geologist? No sense to that. No, it will be accidental death, and nobody more sorry than me."

There was a long moment of silence. The blaster steadied in Roarke's hand. His voice lashed out, whip-like. "Back into the tunnel, both of you. Back or I burn you down where you stand!"

Blane's whole body flamed with bitter resentment, with rebellion that death should come like this. Furiously he considered the chances of a sudden rush against Roarke's weapon. Then he felt Faulkner's slight body twist from his grip, heard Faulkner's thin voice whip out in unfamiliar accents—

*"Tulag! Eo-ghan tuhan. Tuhan!"**

Faulkner was free, plunging toward Roarke. Behind the big man a blue shadow moved; a skinny, rope-like arm descended like a noose over his head, jerking him backward. The blaster's guard ring flared. Faulkner stumbled in his tracks, collapsed almost at Roarke's feet. In Blane's lamp beam the blue shadow resolved itself into the gaunt figure of the diseased Quitchy his single eye fixed upon the slumped body of Faulkner, his grip on Roarke relaxing as though the sight of his fallen master had drained all strength from those scabrous arms.

*Tulag! Seize him and kill. Kill!

Blane threw his lamp aside and flung himself upon Roarke, who drove one mailed fist into the Quitchy's face and turned to meet his new attacker. The native screamed, stumbled backward, leaving Blane alone at grips with the big man. The struggle centered around the blaster, and Blane knew beyond doubt that it was a struggle for life itself. With all the relentless strength of his bull-like body Roarke strove to bring the weapon's barrel against Blane.

Light from the discarded lamp threw their locked shadows upon rock walls. The second lamp, swinging from Roarke's waist, now and again limned in Blane's sight the grotesque helmet of his opponent, the thick, gloved fingers locked upon the blaster's trigger-switch. Relentlessly the weapon was being brought to bear upon him. A grunt of triumph burst from Roarke.

Downward inched the muzzle despite Blane's desperate resistance—and suddenly his fingers found the hollow back of the trigger casting. He thrust his thumb behind it, felt pressure against it as Roarke tried to fire the weapon. Pain flared mercilessly up Blane's wrist as metal tightened cruelly upon flesh and bone, but the flash and agony of the shot he feared did not come. Savagely Roarke twisted the weapon free. A cry of pain burst from Blane as his thumb was all but dislocated. Roarke stepped back, the weapon leveled.

A DARK body catapulted out of the shadows. Skinny arms locked again around Roarke's helmet. The big man squirmed, slipping the bayonet catch that held the headpiece on his shoulders. With a jerk the helmet tore loose, the rim of it striking Roarke's forehead with terrific force. Abruptly the man's body went limp, the blaster falling from his hand. Before Blane could make a move to interfere the Quitchy raised the heavy hel-

met high; there was a sickening crunch of bone as he bludgeoned it across Roarke's unprotected skull.

Silence then but for Blane's own heavy breathing, as down the curve of Roarke's temple flowed two crooked rivulets of blood, phosphorescent, alight with the cold fire of death—by mirzonite.

The Quitchy had faded back into the shadows. Dazed by the swift pace of tragedy, Blane knew beyond doubt that Roarke was dead. Nothing living could have survived that blow.

Through the confusion of his thoughts a voice called feebly. He knelt beside Faulkner. The man's coarse blue shirt was scarlet with blood in the lamp light—scarlet except where the shadows fell, glowing green-gold in the darkness.

"Jim?" asked Faulkner. "Is he—?"

"Dead," Blane answered. "But—he had the sickness also."

"Of course—we were both trapped—seven hours. I'd come around—enough to see him leave. Ten minutes later—by my watch—I crawled out. Ten minutes—made all the difference. I knew—he couldn't stand any more exposure. I cheated him—had to, for the Quitchies' sake—"

"That's over now. We have to get you out of here, to a doctor."

"No good. Thanks—I'd rather go this way—than wait for the other. Have to write—give me paper—"

Blane looked into the man's eyes, filmed now, their fires almost extinguished. Without a word he found the pencil he had flung away, opened one of his maps, and lifted Faulkner so that he could write. Painfully the older man did so, visibly holding on to life by sheer strength of will. When finished he thrust the paper at Blane.

"Take it—to Reardon, lawyer—Administration City. He'll see you through—Jim's confession—back up your story of what happened. Reardon will file—Jim's release. As an employee you'll have—preferred claim—to file on these workings. You'll need money—put up a bond—buy machine loaders. Reardon will stake you—with my savings. Spare the Quitchies—"

He paused, exhausted by the effort of speech.

"I promise," Blane said quietly, "that there'll be no Quitchies working here. Is there nothing else I can do for you?"

The dying man's eyes flickered, briefly agleam once more. "Tulag—he'll be waiting at the cage. I brought him down—afraid Jim might make trouble. Take Tulag up so he can—die in the sun. I've no kin—no friends but the Quitchies. See that they don't suffer—"

The gnarled hand that gripped Blane's tightened in a paroxysm of death, then relaxed forever. Gently Blane let the wasted body sink back.

For this was Toroga, a crude new world, where life moved starkly amid death, and a single man with courage and strength of sacrifice might move mountains of greed and power.

"The Quitchies shan't suffer," whispered Blane, "because you suffered for them—"

THE END

Voice from Down-Under

Dear Mr. Pohl:

The banning of American pulp magazines by our Government has stopped the importation of *Astonishing* and *Super Science,* together with all the other science-fiction magazines, and so the only issues of *"Toni"* to arrive (officially) were the second and third. I have, however, borrowed a copy of No. 4 from Eric F. Russell, which one of his Yank correspondents sent him. So my comments will be confined to these three issues.

"The Cat-Men of Aemt" lived up to the standard of the old Jameson stories. I am eagerly awaiting the arrival of the February issue so that I can borrow it from some unfortunate fan and read "Cosmic Derelict." Bruce Sawyer, leading Aussy fan-artist, has a copy, I believe, so long before the time this reaches you I will probably have read it. The next best stories you have printed are "Into the Darkness" and "Improbability." It gripes me to see so many fans turning the latter yarn down. But I am a Fortean, and thus biased, I suppose. (I wonder why you don't follow Tremaine's lead and print another of Forte's books? Or get hold of Eric Frank Russell for another like "Over the Border"? I myself wrote an article for you on the subject, but got soft-hearted at the last moment and submitted it to a fan magazine. "He Conquered Venus" was a prophecy, not a story. . . .

Thanks to Forry Ackerman, the April 1941 issue is now in my collection. "Imp of the Theremin" was tops in this issue, with "Heredity" a close second. Asimov surprises me. I read and liked his "Half-Breed", yet disliked the sequel. "Heredity" was a good yarn, and just when I thought he was pulling himself out of the desire to hack, I read "Callistan Menace." Oh, well.

Your art work has been certainly fine so far, and I advise you to hang on to Bok. He is, I think, the best artist in the realm of science fiction illustrating at the present time.

"Our Director" was excellent. Not merely a highly-amusing story, but also a lecture on hydroponics in a palatable sugar-coated form. Is John E. Harry an education-reformer? Because if so, then get him to write a story that explains non-Euclidean geometry.

Science fiction is a great educator, though, when the story is written by someone who knows the science his heroes wield. A text-book grabber would never make a science fiction author. It is men like E. E. Smith, with their background of scientific knowledge, who write the Grade-A stories, and from whom we learn. —Vol Molesworth, "Del Monte", Kangaroo Point Road, Sylvania, N.S.W., Australia.

(Continued on page 108)

DO WE HAVE TO DIE?

Is there a Power within that can give Health, Youth, Happiness, Success?

Can we cast off all fear, negation, failure, worry, poverty and disease? Can we reach those mental and spiritual heights which at present appear unattainable? To these eternal questions, the answers given by Edwin J. Dingle, Fellow of the Royal Geographical Society, are unusual. He reveals the story of a remarkable system of mind and body control that often leads to almost unbelievable improvement in power of mind, achievement of business and professional success, and new happiness. Many report improvement in health. Others tell of magnetic personality, courage and poise.

The method was found in remote and mysterious Tibet, formerly a forbidden country, rarely visited by outsiders, and often called the land of miracles in the astounding books written about it. Here, behind the highest mountains in the world, Mr. Dingle learned the extraordinary system he is now disclosing to the Western World.

He maintains that all of us are giants in strength and mind-power, capable of surprising feats. From childhood, however, we are hypnotized, our powers put to sleep, by the suggestions of associates, by what we read, and

by various other experiences. To realize their really marvelous powers, men and women must escape from this hypnotism. The method found by Mr. Dingle in Tibet is said to be remarkably instrumental in freeing the mind of the hypnotizing ideas that paralyze the giant powers within us.

A nine-thousand word treatise revealing many startling results of this system is now being offered by the Institute of Mentalphysics, 213 South Hobart Blvd., Dept. 32E, Los Angeles, Calif. They offer to send it free to any readers who quickly send their names and addresses. Readers are urged to write them promptly, as only a limited number of the free treatises have been printed.

(Continued from page 106)

Pilgrimage

Editor, *Astonishing:*

When recently looking up and down the magazine rack for some entertainment, I immediately selected *Astonishing.* Why? Because of the Bok illustrations.

I have become so enthusiastic over his work that during the holidays a friend and I went to New York City just to meet him. And now one of his originals adorns my East wall.

And (essentially important) your stories are excellent.—Charles X. Allen, Community Center, Fort Wayne, Indiana.

Just Those; More Coming

Dear Sir:

The way to get me to buy your mag is to print more Professor Jameson stories. When I see a new *Astonishing* on the stand I look at the contents page. If it lists a Zorome yarn I buy the magazine—otherwise I don't. Please always have Morey illustrate these stories. Except for Morey, I dislike your artists—most of all Bok.

How many Zorome stories have you printed? I have "The Cat-Men of Aemt" and "Cosmic Derelict"; would like to get any other you may have used.—Martin Alger, Box 520, Mackinaw City, Michigan.

"Continued Excellence"

Dear Editor:

So far you have adequately fulfilled my hopes of a continued excellence in *Astonishing.* The three novelettes and one of the shorts would have been winners in any of the stf mags I take—and I take all of them. There was also an improvement in illustrations. "Editoramblings" is once again happily featured. The

"Fantasy Reviews"—especially the cinema—were encouraging. Only the cover was faulty. Yours is the only other mag that devotes its cover to a drawing and the title—the contents page is inside. Why then, do you waste it with such huge figures as the past few issues have shown? Sherry has done much finer art than this.

Asimov seems always to be on hand with new ideas: witness "Half-Breed" and now "Heredity." Although it was obvious that there would be conflict between the twins, I found that the author solved an otherwise bad situation admirably. His letter was so good it was the best in that dep't; the way he snagged the triumphant sneer of the possible—and probable—hair-splitter! Kindly compare the good Thorp pix for this with those for Cummings', and see the basis for my constant griping.

Almost a tie—I have actually numbered it first in the book—is MacCreigh's very clever idea, "It's a Young World." This could have been a bit more lucid for my comfort, but the unique plot makes up for any slight deficiency. Yes, the Bok pix for this novelet were good, but why didn't he choose more constructive scenes?

"Our Director" is very sly and also informative. The every-day atmosphere and "oh-you-know-joe" characters *made* this yarn, and almost makes me forget the author's atrocity about Venus pirates or something. The Morey pic was super.

"Beyond Doubt" is really the only good short; that racy style of the slightly no-good folks that invaded Monroe's other naughty yarn about Light was delightfully present here, and the Bokpic was spectacular. "Exiles of New Planet" would have been improved with a more coherent narration and Morey could have done better here. Farley's "The Time Capsule" was disjointed and too tragic for the recent crop of fans although this style was once novel. Kyle's pic was Paulistic. Thanks anyway for at least two full-page pix. Cummings' Imp was fun while in the

process of reading, but just didn't add up in the finals.

When will you get Binder and Paul?—Charles Hidley, E5, 2541 Aqueduct Avenue, New York City.

Doesn't Like Bok

Dear Editor:

I just finished my first issue of *Astonishing Stories.* The stories were fair, "Heredity" leading, although I haven't yet read "Our Director" and "It's a Young World."

My main purpose in writing is to tell you that I definitely do *not* like Bok. His illustrations may be marvelous, but they just don't suit me. Your best interior artist for April is Thorp.—Thomas Brackett, Winnsboro, Louisana.

The Reason Why

Dear Editor:

Why is it that fantasy fans always have a craving to change the appearance of the science fiction magazines? I see nothing wrong with the cut for "Viewpoints", in spite of all that's been said about it. And anyway, the minute it's changed, the fans will want it changed back again to what it formerly was. The editor stands, bewildered, wishing he had an atomic bomb so he could shut them up.

While I am in this frame of mind, why didn't you in "Fantasy Reviews" review "Edison the Man"? It was an excellent biography of a great scientist.—Nicholas Carr, 1308 North La Salle Street, Chicago, Illinois.

● Maybe the reason why fantasy fans like to change their magazines around is that, unlike the readers of other magazines, they feel—and quite rightly!—that they have the final word in what the magazine shall be like.

Yes, the deluge of different opinions is sometimes bewildering, but as for using an atomic bomb to "shut them up"—no! A much better use for it would be to explode it under some of

those who keep their opinions to themselves, and thus stimulate them to write in their "Viewpoints."—*The Editor.*

Challenge

Dear Mr. Pohl:

It looks like I'm beginning to write a letter for every story I sell. It's a bad habit. It's like adding insult to injury. First, I ask the reader to sit through a story, and then I ask him to sit through a letter as dessert. It's things like this which will lead some day to a bloody revolt. The public can stand just so much.

Still, I have something to say about "Super-Neutron" and I insist on saying it. It has been said by others (though I will not vouch for the truth of the saying) that no science-fiction story has ever been written without *some* flaw in science, big or little. (The only exceptions are those yarns which don't include *any* science.)

In this story—I'm referring to "Super-Neutron"—I packed all the science I could, being careful to include no fallacy, misstatement or error. It was not easy, but I ended up with something which I *think* is foolproof. In fact, I'll go as far as to dare any reader to poke a hole in any statement made in the story—which is a thoroughly fantastic one, so I'm really going out onto a nice, breezy, exposed limb.

This holds for the scientific angles of the yarn. The logic in it is rather weaker (what do you expect from magazine fiction—Aristotle?), but it will hold up. I've had to make several assumptions, but not one of them is in contradiction to any known scientific fact, and almost all the reasoning is strictly accurate. The reader is invited to attack reasoning and assumptions also, if he wants. I'll take him up on it.

There *is* one sophistry in the story. I covered it up as well as I could, but it's

there . . . . Never mind where! Find it yourself!—Isaac Asimov, 174 Windsor Place, Brooklyn, New York.

"A Curious Flavor"

Dear Mr. Pohl:

Isaac Asimov is back in *Astonishing,* which is enough to merit a letter from me. "Heredity" is very nearly, if not quite as good as "Half-Breed," the story by Asimov which started *Astonishing* on its way with a bang. The Carter twins are real people, as Asimov portrays them. The situations which he uses to bring them together are well chosen, and—well, I *liked* the story.

There is a curious "flavor" to *Astonishing* as a whole that I find rather unpleasant. It is best represented in the current issue by "Our Director" and "Beyond Doubt." It found its strongest representation in Monroe's "Let There Be Light."

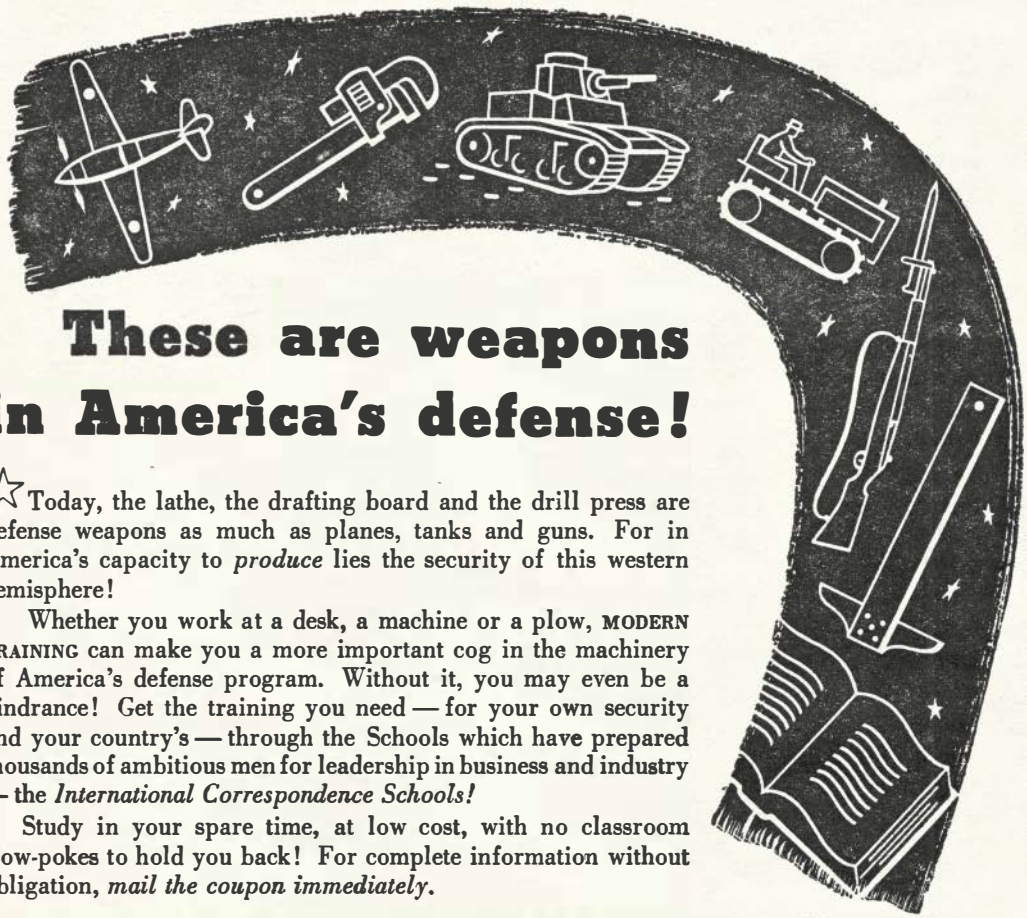
I think the best description of this *Astonishing* "flavor" is that it is a sort of superficial cynicism which is not fully justified. I don't think the present is quite so bad as these writers imply that it is, and I certainly hope that the future will be nothing like the futures they describe.—D. B. Thompson, 2302 U Street, Lincoln, Nebraska.

Comments from—Sirius!

Dear Mr. Pohl:

Quoting from *The Galactic Science Fiction Fan* (published on Planet VII, Sirius):

"*Astonishing Stories,* 10¢, bi-monthly, published on Tellus, Sol. After a period of experimentation, this publication of the Tellurian bipeds has finally hit its stride with the latest (April) issue. Out of a total of 7 stories, 2 are excellent ("Our Director" by Harry and "Heredity" by Asimov), 3 are good, and the rest fair—no mean feat for any mag. The art dep't shows greatest improvement with best pics by Thorp and Bok, though no Marconette. Also of interest are the large "Fantasy Reviews," "Editoramblings," science article, and "Viewpoints" (containing a letter by that great fan Stoy, *not* Etoy!). Magazine would be greatly enhanced by a change to monthly basis."—Bill Stoy, 140-92 Burden Crescent, Jamaica, New York.



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- ☐ Navigation
- ☐ Patternmaking
- ☐ Pharmacy
- ☐ Plumbing
- ☐ Poultry Farming
- ☐ Practical Telephony
- ☐ Public Works Engineering
- ☐ Radio, General
- ☐ Radio Operating
- ☐ Radio Servicing
- ☐ R. R. Section Foreman
- ☐ R. R. Signalman
- ☐ Refrigeration
- ☐ Sanitary Engineering
- ☐ Sheet Metal Work
- ☐ Ship Drafting
- ☐ Shop Practice
- ☐ Steam Electric
- ☐ Steam Engines
- ☐ Steam Fitting
- ☐ Structural Drafting
- ☐ Structural Engineering
- ☐ Surveying and Mapping
- ☐ Telegraph Engineering
- ☐ Telephone Work
- ☐ Textile Designing
- ☐ Toolmaking
- ☐ Welding, Electric and Gas
- ☐ Woolen Manufacturing

BUSINESS COURSES

- ☐ Accounting
- ☐ Advertising
- ☐ Bookkeeping
- ☐ Business Correspondence
- ☐ Business Management
- ☐ Cartooning
- ☐ Civil Service
- ☐ College Preparatory
- ☐ Commercial
- ☐ Cost Accounting
- ☐ C. P. Accounting
- ☐ First Year College
- ☐ Foremanship
- ☐ French
- ☐ Good English
- ☐ High School
- ☐ Illustrating
- ☐ Managing Men at Work
- ☐ Railway Postal Clerk
- ☐ Salesmanship
- ☐ Secretarial
- ☐ Spanish
- ☐ Showcard and Sign Lettering
- ☐ Traffic Management

HOME ECONOMICS COURSES

- ☐ Advanced Dressmaking
- ☐ Foods and Cookery
- ☐ Home Dressmaking
- ☐ Professional Dressmaking and Designing
- ☐ Tea Room and Cafeteria Management, Catering

Name..... Age..... Address.....

City..... State..... Present Position.....

Canadian residents send coupon to International Correspondence Schools Canadian, Limited, Montreal, Canada
British residents send coupon to I. C. S., 71 Kingsway, London, W. C. 2, England

2 AMAZING VALUES

YOURS ON A COMPLETE MONEY-BACK BASIS

A GREAT MAN MADE THIS DRY SMOKING PIPE FAMOUS THE WORLD OVER . . .

Back in 1893, Paul Kruger was president of the Boers. During the Boer War he was military leader of this gallant country. Kruger was loved by his people who affectionately called him OOM. The pipe which he smoked was the same shape you see here.

pipe shown 4/5 actual size

Original Rum & Maple Tobacco. Here's your chance to try this luxury blend Free. foil pack was 70c, now 25c.

Three Squires Tobacco is mild, friendly, mellow. A great value at 15c. These tobaccos can be smoked individually or blended.

Here are two styles—each a luxury pipe, each one a precision job—truly the pride of the craft. Good to look at . . made to lost . . and above all, they are the kind of pipes that give a man a full measure of smoking pleasure.

FORGET this incredible low price—for a while. Think only of superior quality . . . visualize the proudest pipes in any man's collection . . . the type of pipes you might have bought but for the fact they were priced beyond your reach. That's the kind of an opportunity we're offering you NOW . . . and at NO RISK at all.

The magic of the great outdoors, at this time of the year, calls for a pipe that's a pal. At the ball game, on fishing trips, at mountain resorts, and at the seashore — indoors or out in the open — you'll find the RARE RUSTIC and the OOM PAUL two grand companions. Read about them individually, note the FREE extras and our absolute Money-Back guarantee then treat yourself RIGHT.

Here's our pledge. You examine pipe, smoke it with the tobaccos, enjoy it. If you decide our claims don't measure up 100%, keep pipe and tobaccos . . . and we return your money in full. Speed your order today. Dollar bill, check, money-order or stamps will do . . . and you'll get entire combination without further cost. Or, if you prefer, send penny post card and pay postman $1.00 plus 18c C.O.D. fee. Illustrated catalog included Free.

	ALL FOR
1 OOM PAUL PIPE VAL. 2.50 1 SAMPLE PKG. *Original* RUM & MAPLE TOBACCO 1 SAMPLE PKG. THREE SQUIRES	$1.00 POST PAID

It's a sturdy, fine friendly pipe—looks good—smokes good—and keeps sweet. Hand-carved, of finest root briar—stays cool to the touch. The deep bowl holds lots of tobacco—lasts through a long radio program or a novel. Great when you sit and chat—and don't want to refill.

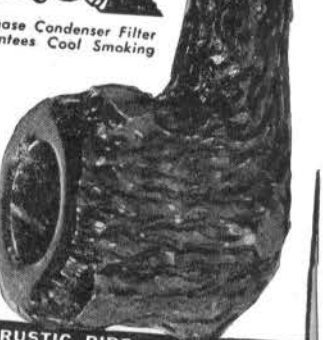
ONLY A FEW MEN CAN HAVE THIS

RARE RUSTIC BRIAR PIPE

Cut from GENUINE BRIAR ROOTS

Because of the size of the bowl, this rich-looking pipe can be cut only from large-size briar roots. It's a real man's pipe — rugged, hefty, yet the delicate carvings give it remarkable beauty and lightness. Easy to smoke — holds a generous filling of tobacco.

Six Phase Condenser Filter Guarantees Cool Smoking



Pipe shown 3/4 actual size

RARE RUSTIC PIPE	reg value	ALL FOR
1 POUCH *Original* Blend 53 RUM & MAPLE TOBACCO	$2.00 .15	$1.00 POST PAID
1 FOIL PACK THREE SQUIRES TOBACCO	.15	
TOTAL VALUE $2.30		

Original Rum & Maple — America's No. 1 Fine Tobacco. The Pouch Pack sold for 40c. now sells for 15c.

Three Squires Tobacco is mild, friendly, mellow. A great value at 15c. These tobaccos can be smoked individually or blended

25¢ EXTRA — FREE

With any 2-pipe combinations you order, we will send you FREE 5 FULL PACKS of Rum & Maple Gum. If you haven't yet tasted Rum & Maple Gum you'll enjoy a delicious flavor such as you have never tasted in gum before.

Pipe Purveyors & Tobacconists

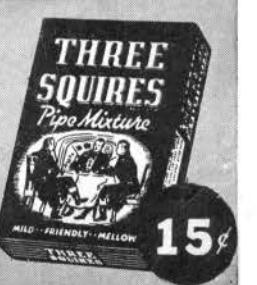
THE HOUSE OF WESTMINSTER, Ltd.
189-T FOURTH AVENUE (Corner 16th Street) NEW YORK, N. Y.

If Convenient, Visit Our Retail Shop

TWO GREAT TOBACCOS SOLD FROM COAST-TO-COAST

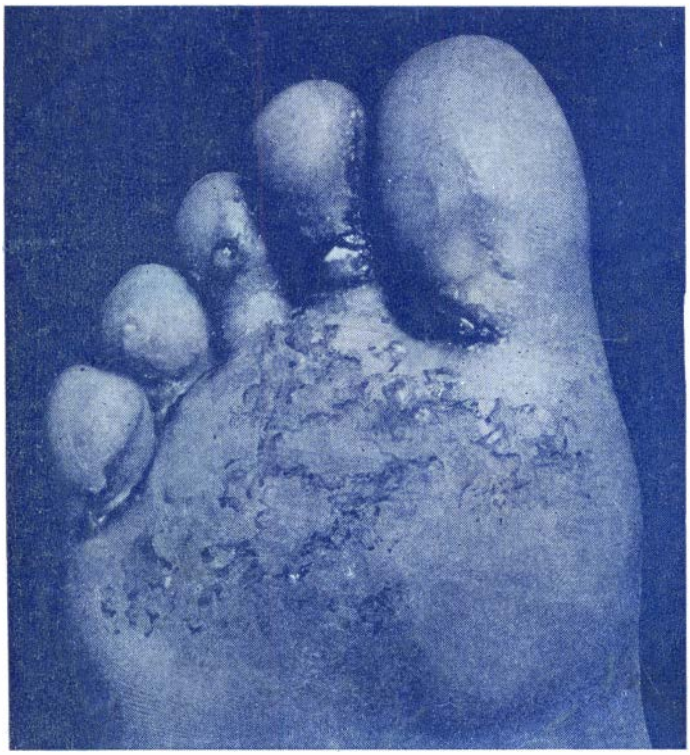
When the original RUM and MAPLE Blend 53 first saw the light of day, it was a luxury smoke . . . too expensive for the lean purse. Today, absolutely unchanged in any particular but because of volume sales, it is priced within the reach of all—millions of men are choosing it daily as their favorite pipe tobacco . . . and so will you. In two handy sizes: Foil Pack 25c was 70c; Pouch size 15c, was 40c. Available at all stores.

Three Squires Tobacco is meeting with great success. It's a mild—friendly—mellow mixture. A great value at 15c. These two tobaccos can be smoked individually or blended together. ASK FOR THESE TOBACCOS BY NAME AT STORES EVERYWHERE.



FOOT ITCH

ATHLETE'S FOOT



WHY TAKE CHANCES?

The germ that causes the disease is known as Tinea Trichophyton. It buries itself deep in the tissues of the skin and is very hard to kill. A test made shows it takes 15 minutes of boiling to destroy the germ, whereas, upon contact, laboratory tests show that H. F. will kill the germ Tinea Trichophyton within 15 seconds.

H. F. was developed solely for the purpose of relieving Athlete's foot. It is a liquid that penetrates and dries quickly. You just paint the affected parts. H. F. gently peels the skin, which enables it to get to parasites which exist under the outer cuticle.

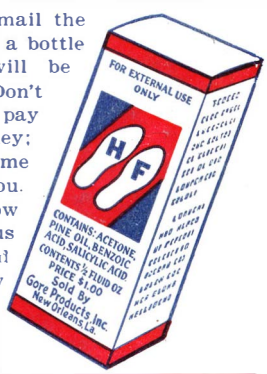
ITCHING OFTEN RELIEVED QUICKLY

As soon as you apply H. F. you may find that the itching is relieved. You should paint the infected part with H. F. each night until your feet are better. Usually this takes from three to ten days.

H. F. should leave the skin soft and smooth. You may marvel at the quick way it brings you relief. It costs you nothing to try, so if you are troubled with Athlete's Foot why wait a day longer.

H. F. SENT ON FREE TRIAL

Sign and mail the coupon, and a bottle of H. F. will be mailed you immediately. Don't send any money and don't pay the postman any money; don't pay anything any time unless H. F. is helping you. If it does help you, we know you will be glad to send us $1 for the bottle at the end of ten days. That's how much faith we have in H. F. Read, sign and mail the coupon today.



PAY NOTHING TILL RELIEVED

SEND COUPON

According to the Government Health Bulletin No. E-28, at least 50% of the adult population of the United States are being attacked by the disease known as Athlete's Foot.

Usually the disease starts between the toes. Little watery blisters form, and the skin cracks and peels. After a while, the itching becomes intense, and you feel as though you would like to scratch off all the skin.

BEWARE OF IT SPREADING

Often the disease travels all over the bottom of the feet. The soles of your feet become red and swollen. The skin also cracks and peels, and the itching becomes worse and worse.

Get relief from this disease as quickly as possible, because it is both contagious and infectious, and it may go to your hands or even to the under arm or crotch of the legs.

GORE PRODUCTS, Inc. POP

815 Perdido St., New Orleans, La.

Please send me immediately a bottle of H. F. for foot trouble as described above. I agree to use it according to directions. If at the end of 10 days my feet are getting better, I will send you $1. If I am not entirely satisfied, I will return the unused portion of the bottle to you within 15 days from the time I receive it.

NAME .....

ADDRESS .....

CITY..... STATE.....